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OCCUPATIONAL SEGREGATION
AND ITS EFFECTS:

A Study of Women in the
Alberta Public Service

A Summary of a Report Submitted to the
Alberta Human Rights Commission

by

Women Associates Consulting Inc.

1979

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Preface

Some time ago the Alberta Human Rights Commission approved the concept of a study which would examine the employer practices and employee characteristics of the Alberta Public Service. The object of the study was to determine the factors which significantly influence the averages of the salaries paid to men and women and, if possible, to determine rational ways of reducing the known difference which exists between those average salaries.

The Commission wanted a study that would analyse the elements which influence the status of women in the Alberta Public Service, a study which would go far beyond the production of a profile of the status that women have in that Service.

Upon receiving budget approval for the project, the Commission retained a private consulting firm to conduct the study. A summary of the report submitted by that firm is printed below. The decision to use independent reserachers to carry out the study was made to accommodate the need for co-operative effort from all the parties involved, and to protect the study from claims of potential bias or political interference.

Members interested in reading the full report may borrow a copy through their Departmental library, their Personnel Director's office, the Union headquarters, or the Human Rights Commission offices. Specific questions regarding the report should be addressed to Dr. Dorothy Richardson, Assistant Director - Research and Education Services for the Commission. She can be reached at 427-7661 in Edmonton.

HIGHLIGHTS OF THE REPORT

Even a cursory examination of the Alberta Public Service reveals that the position of women is vastly inferior to that of men. Although women are well-represented (46.5% of all employees), their average salary is 65% that of men, with women earning $11,334 per year and men earning $17,437 (1978 statistics). As well, only 6.5% of employees at the management level are women.

However, the reasons for this disparity are complex and not due to a single cause. A study was commissioned by the Alberta Human Rights Commission to determine the factors responsible for the inequality between women and men and the relative importance of each factor.

Thus the study was designed to go beyond a simple calculation of the current status of women to a determination of causes and, ultimately, to the development of the outlines of a remedial action program. The study was funded by the Government of Alberta and sponsored by the Human Rights Commission and the Personnel Administration Office.

The study included a number of components, each designed to examine a different aspect of the problem:

1. An analysis of the organizational structure of the Alberta Public Service in order to identify any formal barriers which prevent women from advancing through the hierarchy and to identify the effects of occupational segregation by sex.
2. A survey of female and male employees in sex-integrated occupations in order to determine the relative contribution of lack of qualifications and the sex of the employee to the failure of women to advance.
3. In-depth interviews with women and men at the management level in order to obtain a more comprehensive picture of the problems women managers encounter.

An analysis of the jobs held by women and men in the Public Service reveals that substantial sex-segregation exists, as it does in the Canadian labour force. 67% of the 13,000 female employees are found in Business and Clerical occupations. Smaller numbers are found in Professional and Service occupations. Men are more evenly distributed among a variety of occupational groups, with the largest number (33% of the 15,000 male employees) in Professional occupations. Substantial numbers of men are also found in Business and Clerical, Social Services, Technical, Trades, Construction and Natural Resources occupations. This itself constitutes an important barrier to women, since male occupations tend to pay considerably more than even those female occupations which require more extensive qualifications.

An analysis of recruitment policies uncovered no formal mechanisms that stream women and men into different jobs. The sex-segregation which exists is, thus, largely a function of the training that women and men have received prior to entering the work force. This reflects the differences in socialization which employers and employees bring to their work experience and accounts for the selection of occupations deemed appropriate for each sex.

The organizational analysis uncovered no formal discriminatory policies within the Alberta Public Service.

The survey refers to a population of about 19,600 employees who are in sex-integrated occupations within the Alberta Public Service (about 69% of the total work force). These employees were divided into three age (20-30, 31-45, 46+), and four occupational groups (Business and Clerical, Professional, Social Service and Technical). Completed questionnaires were obtained from 3,612 employees and included managers from each of the occupational groups.

The survey uncovered a number of differences between women and men in their level of job preparation. Multivariate statistical analyses were used to investigate the inter-relationship of these differences and their effect on employees' salary. The analyses found that women, overall, had less education and had accumulated fewer years of job experience. As well, women applied less frequently for promotion. However, number of applications per se did not affect how far employees had advanced. Although job performance was related to advancement, women and men did not differ on this variable.

Thus, the qualifications most responsible for the difference in position between women and men are education and experience.

Within the sample, there was a salary discrepancy of about $5,700 between women and men. A large portion of this difference is due to the fact that women earned less because they were less well educated. Another portion was due to the fact that women had fewer years of job experience.

> HOWEVER, A DIFFERENCE OF ABOUT $3,097 REMAINS WHICH CANNOT BE ATTRIBUTED TO DIFFERENCES IN QUALIFICATIONS AND WHICH IS THEREFORE ASSOCIATED WITH THE SEX OF THE EMPLOYEE.

That is, women who are of the same age as men, in the same occupational category, with similar levels of education and years of experience earn about $3,097 less per year than men.

Women and men also differ on a number of subjective characteristics. Women spent more time on household tasks and were somewhat less committed to their careers. Men experienced more interference from their families on the job.

The extent of interference occurred because more of the men were married and had children and also because their jobs were more demanding.

However, none of the differences between women and men were large. On some of the characteristics, differences on these variables among the four occupational categories were considerably larger than differences between women and men within a category.

> THUS, THESE DATA CHALLENGE MANY OF THE STEREOTYPES HELD ABOUT WOMEN AND MEN AND SUGGEST THAT, FOR WORKING WOMEN AT LEAST, THE SIMILARITIES BETWEEN WOMEN AND MEN ARE GREATER THAN THE DIFFERENCES.

Moreover, these subjective factors did not have large effects on advancement although a small proportion of the salary differential can be attributed to them.

The survey also found that many individuals, women included, have negative attitudes toward women as employees, although women's attitudes were more favourable than were men's.

The in-depth interviews with managers supported the results of the survey. 58% of all women interviewed said that they had experienced discrimination because of their sex and this was confirmed by 54% of the male managers who also believed that women, as a group, were the target of discrimination.

THUS IT CAN BE SEEN THAT CONSIDERABLE DISCRIMINATION AGAINST WOMEN OCCURS THROUGH INFORMAL MECHANISMS, EVEN IN THE ABSENCE OF FORMAL DISCRIMINATORY POLICIES.

These results are congruent with studies of other organizations which also find that even well qualified women do not advance as rapidly as men.

Research on differential socialization suggests that the existence of discrimination has negative effects which extend beyond the group of women who are its direct targets. The fact that women are infrequently seen in positions of responsibility and that even well qualified women do not advance in proportion to their abilities, has a negative effect on other women early in their careers and may be partially responsible for the fact that they obtain lower levels of qualifications. Thus, a destructive cycle is set in motion, in which failure to qualify and failure to advance affect one another reciprocally. In a very real sense, the lower qualifications of women can be seen as the residue of past socialization.

The fact that women are less qualified and the fact that negative attitudes exist which impede the progress of even well qualified women, means that simply eliminating formal discriminatory mechanisms or implementing equal opportunity measures will have negligible effects on the position of women currently in the work force. In fact, this has been the experience of organizations which have implemented equal opportunity programs. Therefore, Affirmative Action programs are required to aggresively attack the problem and eliminate both the informal discrimination which currently exists as well as the effects of past discrimination and differential socialization. These programs involve all aspects of the personnel function: recruitment, selection, training, development, promotion and lateral transfer; identification and encouragement of women with potential; career planning and counselling; elimination of occupational segregation; implementing "equal pay for work of equal value" legislation; and, establishing attitudinal awareness training for all employees so that deep-seated, behaviour-generating attitudes can be articulated and resolved.

RECOMMENDATIONS

AFFIRMATIVE ACTION

Recommendation 1

It is recommended that the Individual Rights Protection Act be changed so that private corporations, the Alberta Public Service and Crown Corporations are required to provide Affirmative Action Programs for women.

Recommendation 2

It is recommended that the Alberta Government require "contract compliance" from corporations with which the Government conducts business (suppliers, contractors, etc.) so that government suppliers and contractors will establish and implement Affirmative Action Programs if they wish to do business with the Government.

Recommendation 3

It is recommended that an Office of Equal Opportunity be created to oversee the creation of Private sector Affirmative Action Programs, to ensure compliance and to monitor implementation.

Recommendation 4

It is recommended that an Office of Equal Opportunity be created within the Alberta Public Service to oversee the creation of Departmental Affirmative Action Programs, to ensure compliance and to carry out ongoing monitoring.

Recommendation 5

It is recommended that the over-all responsibility for the Program be assigned to the Deputy Minister (or his or her equivalent) in each Department and Crown Agency.

Recommendation 6

It is recommended that the on-going implementation of Affirmative Action be assigned to an individual in each Department and Agency, and that this person have sufficient rank and operating budget so that the Program has credibility with all employees.

Recommendation 7

It is recommended that all managers be held accountable for implementation of the Affirmative Action Program in the same way that they are accountable for Departmental goals and objectives and that their performance in this area be included in their overall performance rating.

Recommendation 8

It is recommended that both short and long term objectives be set for implementation of the Affirmative Action Program and that the objectives be achievable, measurable and realistic with respect to the qualifications and aspirations of employees and the staffing needs of the Alberta Public Service.

COMPENSATION

Recommendation 9

It is recommended that a policy of equal pay for work of equal value be implemented to ensure that, although women often perform different work than men, they will receive the compensation to which their work actually entitles them.

Recommendation 10

It is recommended that the classification criteria be reviewed and revised to ensure that the work which women typically perform is properly evaluated and adequately compensated.

Recommendation 11

It is recommended that the classification levels of women and men be reviewed and where there are discrepancies between women and men which cannot be justified on the grounds of qualifications or responsibilities, that these anomalies be corrected.

STAFFING PROCEDURES

Recommendation 12

It is recommended that the degree of reliance on internal recruitment be increased.

Recommendation 13

It is recommended that Departmental utilization studies be conducted so that women with qualifications, with interest and with the potential to become qualified will be identified and actively encouraged to fill management positions and positions in non-traditional areas.

It is further recommended that women so identified be involved in career planning and pathing, so that a record is maintained of their progress in the organization.

Recommendation 14

It is recommended that women be actively recruited for the job categories in which they are under-represented and that men be actively recruited for the job categories in which they are under-represented so that occupational segregation in the Public Service is eliminated.

Recommendation 15

It is recommended that all Job Bulletins and all external job advertising include language which specifically invites applications from both women and men.

Recommendation 16

It is recommended that all position specifications be reviewed to determine if any qualifications are inflated. If this is found to occur, the specifications should be revised to ensure that only those qualifications are retained which are strictly necessary for adequate performance on the job.

Recommendation 17

It is recommended that all pre-screening criteria be carefully examined to ensure that none of them have a negative impact on women candidates.

Recommendation 18

It is recommended that the part-time work experience of candidates be included in calculating seniority and level of skill so that part-time work experience will be counted in the advancement process.

Recommendation 19

It is recommended that the Public Service implement firm policy to ensure that only job-related questions be asked of candidates in the job interview so that all questions concerning marital status, pregnancy, child care arrangements, etc. will be eliminated.

Recommendation 20

It is recommended that a representative from Personnel monitor all competitions to ensure that women candidates are asked fair questions and receive fair treatment.

Recommendation 21

It is recommended that women be included on all selection panels.

Recommendation 22

It is recommended that all staff who are likely to sit on selection panels receive training concerning the fair questioning and treatment of women candidates.

Recommendation 23

It is recommended that any criteria for judging a candidate which relates to comportment, personality or appearance be eliminated and that candidates be judged solely on their ability to do the job for which they are applying.

Recommendation 24

It is recommended that one comprehensive appraisal form be utilized in the evaluation of all Public Service employees.

Recommendation 25

It is recommended that the criteria for rating performance be strictly confined to job skills.

Recommendation 26

It is recommended that the Public Service encourage women employees to acquire educational credentials and assist them financially in doing so.

Recommendation 27

It is recommended that, in addition to serving overall staffing needs, the educational programs of the Public Service be directed toward improving the position of women employees. This includes giving women priority in access both to in-house and external programs, to educational leave and to financial assistance.

Recommendation 28

It is recommended that a training analysis be conducted to determine if women have equal access to development and to ensure that they be given equal access if this does not presently occur.

Recommendation 29

It is recommended that career counselling services be provided to all employees so that they may be assisted in planning their careers within the Public Service.

Recommendation 30

It is recommended that all supervisors and managers receive specific training, to provide them with the skills needed to counsel women in determining their career goals and to further assist in the achievement of those goals.

Recommendation 31

It is recommended that Career Development workshops be offered to all interested women in the Public Service.

Recommendation 32

It is recommended that attitudinal workshops be held for managers at all levels of the Public Service so that they may have an opportunity to articulate and resolve their concerns regarding the role of women in the Alberta Public Service.

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OCCUPATIONAL SEGREGATION AND ITS EFFECTS:

A STUDY OF WOMEN IN THE ALBERTA PUBLIC SERVICE

CAROL REICH, PH.D.
HELEN LAFOUNTAINE

WOMEN ASSOCIATES
CONSULTING INC.

WITH SPECIAL ASSISTANCE BY
RICHARD WOLFE, PH. D.

1979

PREFACE

Some time ago the Alberta Human Rights Commission approved the concept of a study which would examine the employer practices and employee characteristics of the Alberta Public Service. The object of the study is to determine the factors which significantly influence the averages of the salaries paid to men and women, and, if possible, to determine rational ways of reducing the known difference which exists between those average salaries.

The Commission wanted a study that would analyse the elements which influence the status of women in the Alberta Public Service, a study which would have to go far beyond the production of the profile which the status of women has in that Service.

Upon receiving budget approval for the project, the Commission retained a private consulting firm to conduct the study. This publication is the report submitted by that firm, and it does not necessarily contain the opinions of the Commission. The decision to use independent researchers to carry out the study was made to provide for the co-operative effort of all parties involved, and to protect the study from claims of potential bias, and/or from claims of political interference.

M. Wyman

M. Wyman
(Chairman)

for: The Alberta Human
Rights Commission

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INTRODUCTION

> "It is now clearly recognized that the status of women in any society reflects and is integrated with all of its values and institutions. The most important clue to woman's status anywhere is her degree of participation in economic life."[1]

The quotation above requires only slight modification to render it applicable within any organizational framework. That is, the status of women in any organization reflects and is integrated with all organizational values and structures. The most important clue to the status of women in any organization is their degree of participation (both by rate and by level) in that organization's economic life.

In recent years, many organizations have analyzed the degree of women's economic participation in order to determine if women experience discrimination in the work force. This question has also been of particular concern to the Alberta Human Rights Commission. As a result, in January, 1978, the Commission engaged a management consulting firm to conduct a comprehensive study of the status of women in the Alberta Public Service. The study was funded by the Government of Alberta.

When looked at in terms of participation rate, the number of women in the Public Service is impressive: women comprise 46.5% of all employees. In comparison, the percentage of women employed in the Ontario Public Service is 39.2%, while the percentage for the Federal Public Service is 36.7%. However, if economic participation is measured by position and salary, the results are strikingly different. Women comprise 6.5% of those in management positions. Although this figure is again higher than for the Federal Government (3%), or for the Ontario Public Service (5.3%), it clearly demonstrates the low position of women in the Alberta Public Service (see TABLE 1).

A second measure of the level of participation in the economic life of the organization is the salary differential between male and female employees. As of July, 1977, 80% of all women in the Public Service earned less than $13,000, while 75% of all men earned more than $13,000. At that time, the average annual salary of women was $11,334 while the salary for men was $17,437 (see FIGURE 1). This differential is generally comparable to the national differential reported last in 1976 by Statistics Canada: women full year workers earned an average of $8,114 while men earned $15,180.[2]

These figures do not take into account other variables which also affect salary. Gunderson reports that differences in age, education and job level are partially responsible for

TABLE 1

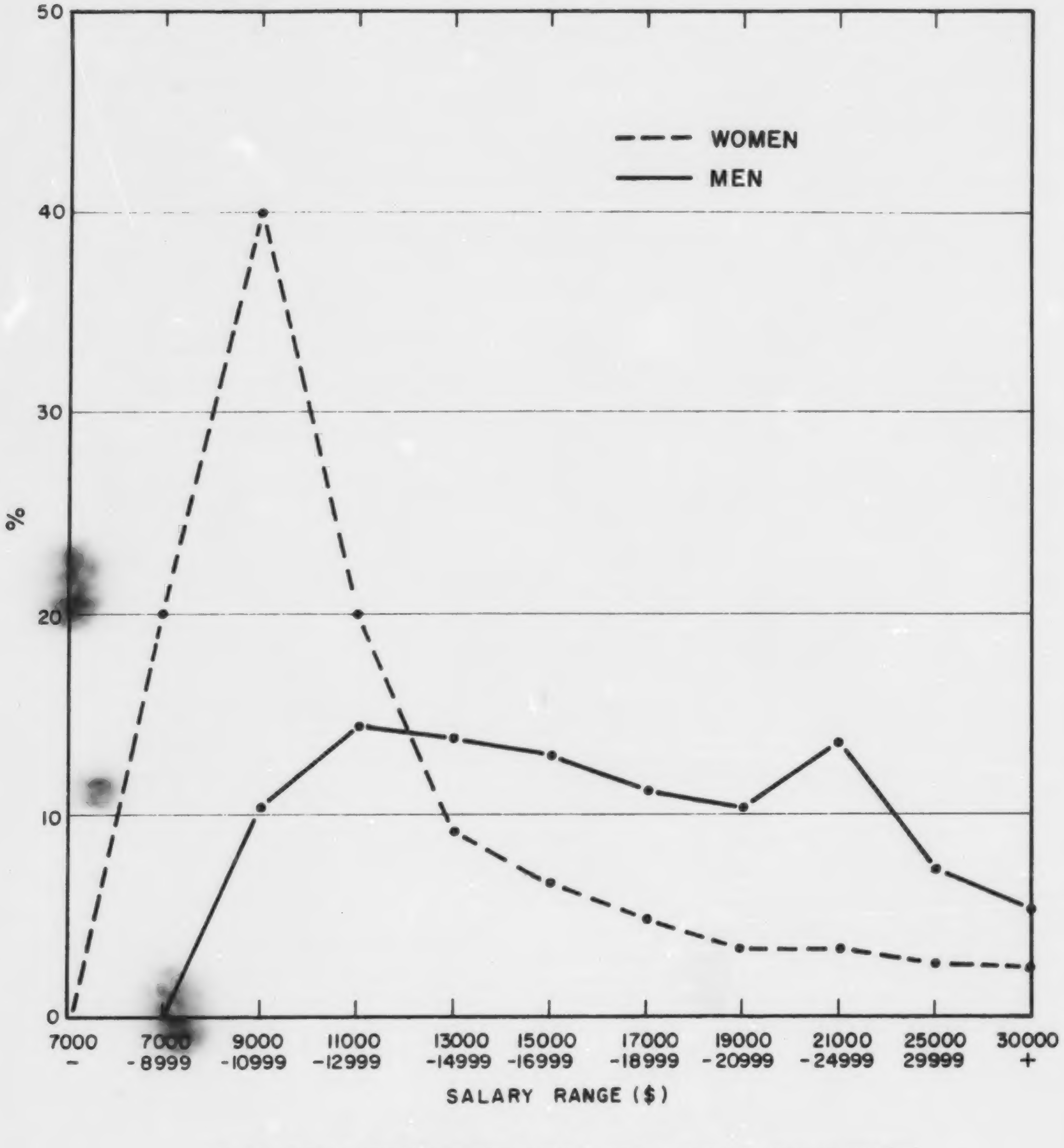
Comparison of Female Representation in Management Classifications

July, 1977

Class	Number of Females	% of Females
S.O. I	126	8.9%
S.O. II	34	3.9%
E.O. I	3	1.9%
E.O. II	0	0%
	163	6.5%

* % of total number of managers in that classification

(Table courtesy of Personnel Administration Office)



SALARY DISTRIBUTION BY SEX, JULY 1977

EACH SEX AS A PERCENTAGE OF TOTAL SALARIES FOR THAT SEX

FIGURE 1

the salary gap.[3] However, beginning with a report by Ostry in 1968,[4] all empirical studies of the salary discrepancy between men and women indicate that a substantial portion of the differential can be attributed to no other factor than the sex of the employee.

It is precisely this condition that the Alberta Human Rights Commission wished to examine. The Commission's specific intent was to determine, if possible, the extent to which the lower status of women within the Alberta Public Service could be attributed to other variables. Thus, the study examines both employer practices (systemic barriers) and employee characteristics and attempts to move beyond a mere description of the situation into the determination of causes. The Commission's objective in requesting the study was to determine what types of remedial action might be instituted to improve the economic participation of women in the Alberta Public Service.

FOOTNOTES/INTRODUCTION

1. R.R. Leavitt, "Women in Other Cultures". in Gornick, V. and Moran, B.K., ed., Woman in Sexist Society, New York, Mentor, 1971.

2. Statistics Canada, Income Distribution by Size in Canada, 1976 (Catalogue 13-207, Annual, Table 62).

3. M. Gunderson, "Work Patterns". in Cook, G., ed., Opportunities for Choice, Ottawa, Information Canada, 1976.

4. S. Ostry, "The Female Worker in Canada", Ottawa, Information Canada, 1968.

SCOPE OF THE STUDY

On one level, the status of women in any organization can be determined by examining such empirical data as the number of women employed by the organization and the remuneration they receive. According to these criteria it can be demonstrated readily that the status of women in the Alberta Public Service is substantially lower than that of men. Further examination at this level of inquiry will reveal the extent of the inequality as well. While it is essential to define these aspects of the problem, it is likewise essential that examination continue on other, more subtle, levels in order to determine the reasons for the problem's existence.

For example, examination of application statistics within the Alberta Public Service reveals (see TABLE 2) that the higher the position classification, the lower the number of female applicants.

While this category of statistics reveals who applies for what positions, it does not reveal the causes of male/female differentials among the applicants themselves. The present study has been designed to provide information which will illuminate these causes. It is comprised of three major components, each of which permits an exploration of the complex, underlying aspects of the problem of women's unequal participation. The three components, ORGANIZATIONAL ANALYSIS,

TABLE 2

SUMMARY OF SELECTED COMPETITIONS - JANUARY - MAY, 1977

Classification	No. of Competitions	Total Response	Female Response	Male Response	Successful Applicants
PART A - CLERKS					
Clerk III	18	614	394	220	M-2 F-16
Clerk IV	11	363	200	163	M-3 F- 8
Clerk V	4	139	47	92	M-4 F- 2
PART B - PSYCHIATRIC NURSES					
Psychiatric Nurse I	2	15	15	--	M-0 F- 2
Psychiatric Nurse II	3	17	10	7	M-2 F- 0
Psychiatric Nurse III	1	7	2	5	M-1 F- 0
PART C - SENIOR OFFICER					
Senior Officer I - M141	9	344	34	310	M-9 F- 3
Senior Officer II - M142	4	266	10	256	M-4 F- 0

(Table Courtesy of Personnel Administration Office)

SURVEY OF EMPLOYEES and MANAGEMENT INTERVIEWS are outlined below.

ORGANIZATIONAL ANALYSIS

Analysis of the organizational structure represents an attempt to determine whether or not there is discrimination against women in the formal personnel policies and procedures of recruitment, selection and promotion or transfer within the Alberta Public Service. However, before the procedures themselves can be examined, it is necessary to place them within the context of the larger society of which both the Public Service and its employees are a part.

Organizational Analysis also looks at the extent of sex segregation within the work force. A preliminary study of the distribution of women and men revealed that 31% of all employees occupied positions held mainly by persons of the same sex. Thus, the Alberta Public Service is an employer, like many others, whose work force is, to a large extent, sex-segregated.

Also clearly evident at this stage of the inquiry was that the positions which women occupy are lower paid and less prestigious. In this regard as well, the Public Service as an employer is consistent with both private and public sector organizations where women have also been found to occupy low-salaried, sex-segregated positions. For example, this employment pattern has been reported by the Canadian Broadcasting

Corporation in 1975, Canadian National in 1975, Central Mortgage and Housing Corporation in 1977, the National Film Board in 1978 and the Royal Bank of Canada in 1978.

Also, this component of the study looks more closely at what the implications of occupational segregation by sex may be for women's participation in the economic life of the organization. This examination also includes sex-segregation within occupations in which both men and women are found.

A final aspect of this part of the study is JOB STREAM ANALYSIS. Positions of responsibility are at the apex of the process of vertical mobility. Therefore, it was thought profitable to focus specifically on those people - managers - who have been most successful in advancing through the Public Service hierarchy. Managers may have special knowledge concerning the logistics of achieving corporate success. In turn, this information may be of benefit to employees who aspire to management positions. Of particular significance in this regard is examination of managers' educational and employment histories since these may document the major paths to management positions.

SURVEY OF EMPLOYEES

The focus of this component is a survey of 3,612 employees drawn from the remaining 69% of the Alberta Public Service work force who do not occupy sex-segregated positions. This aspect of the study can be described as an examination of the policies and procedures in motion.

The survey was designed to assemble information on the job-related characteristics of women and men employees: the extent of their family responsibilities, their level of education, years of experience, degree of career commitment, performance on the job and rate of application for promotion. These factors were studied in order to determine their impact on the positions which women and men attain. If the organizational analysis identifies discriminatory mechanisms within the formal structure, these will surface on the survey as a discrepancy between women's qualifications and the position they have attained. However, the failure of qualified women to advance could also be caused by the existence of informal discriminatory practices which favour men even though the official policies of the organization would not appear to do so.

Finally, it is also likely that some of the discrepancy in advancement between women and men is due to the failure of women to make themselves equally qualified for promotion. In order to discover if this is the case requires a further examination of the factors listed previously to determine if any or all of

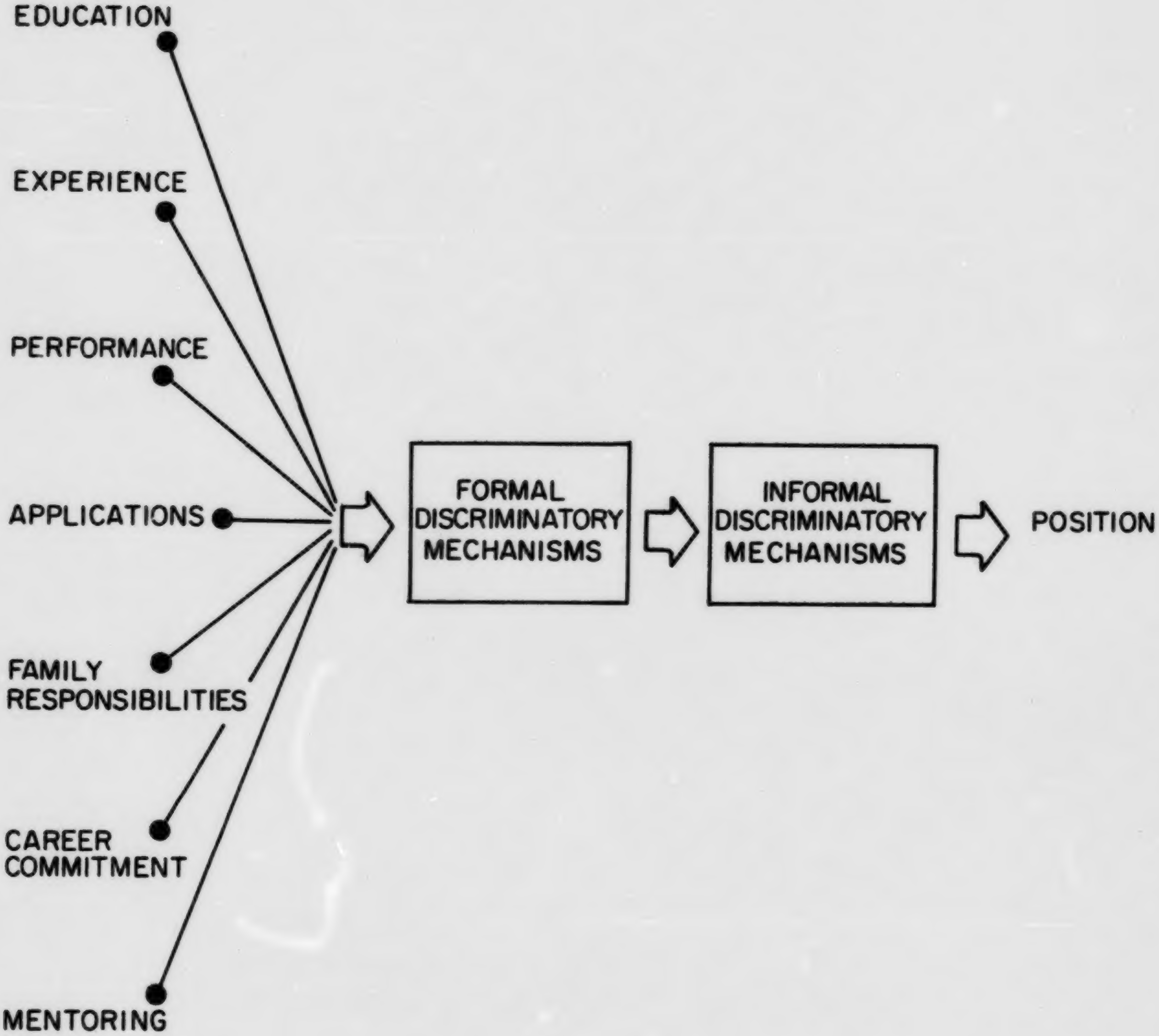

EDUCATION
EXPERIENCE
PERFORMANCE
APPLICATIONS
FAMILY RESPONSIBILITIES
CAREER COMMITMENT
MENTORING
FORMAL DISCRIMINATORY MECHANISMS
INFORMAL DISCRIMINATORY MECHANISMS
POSITION

FIGURE 2

them impact on women more severely than they do on men (see FIGURE 2). The survey analyzes this possibility as well and attempts to locate the most significant sources of difficulty.

MANAGEMENT INTERVIEWS

Although the questionnaire method of gathering information is an effective one, the opportunity to conduct in-depth interviews adds a more personal dimension to the data assembly process. The interviews covered the same material as the survey. Since the sample size for the management interviews was small, (n=70), this component should be viewed as supplementary to the Survey and Organizational Analysis components.

In spite of their supplementary status, much can be learned from the interviews. They are especially valuable because they afford a richer examination of the advancement process within the Alberta Public Service than can be obtained through a survey questionnaire. The interviews also serve to expand the data base to a broader spectrum of the Public Service. This is so because the sample was drawn from the total population of managers, including those in sex-segregated positions. As well, the interviews were utilized to obtain data for the Job Stream Analysis. A long form of the interview was administered to 37 men and 33 women.

ORGANIZATIONAL ANALYSIS

Understanding the occupational structure of any organization requires that the organization and its employees be viewed in the context of the larger society in which they exist, for whatever is customary in the society at large will be reflected in its institutions. Employees who enter the Alberta Public Service do so as adults who possess a level of education, personal attributes and a set of attitudes which have been formed through cultural and sex-role socialization. This socialization derives from the education/religious system, the media and society as a whole. Their employers have shared like experiences in socialization and these, in turn, affect the organization's personnel policies. The effects of these experiences on employees and employers are crucial for understanding both the occupations which employees choose for themselves and the occupations into which employers stream them (see FIGURE 3). In Canada, as in virtually all societies, there is a strict division of labour along sex lines which is only just beginning to show faint signs of deterioration. And in Canada, as in all societies, the division of labour is such that the tasks which have the highest degree of prestige, value, authority and socio-economic importance are almost always done by men.[1]

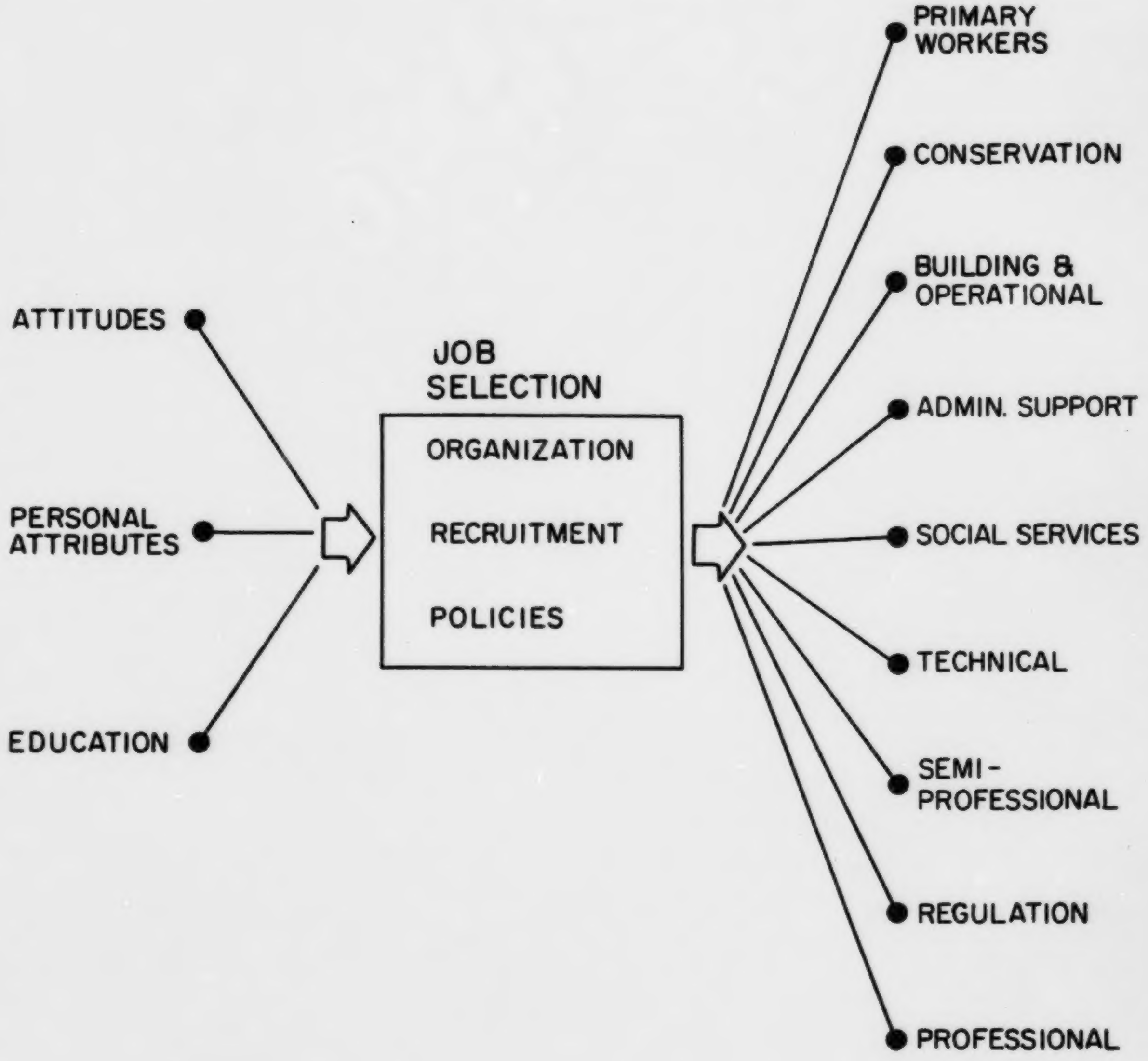

ATTITUDES
PERSONAL ATTRIBUTES
EDUCATION
JOB SELECTION
ORGANIZATION
RECRUITMENT
POLICIES
PRIMARY WORKERS
CONSERVATION
BUILDING & OPERATIONAL
ADMIN. SUPPORT
SOCIAL SERVICES
TECHNICAL
SEMI-PROFESSIONAL
REGULATION
PROFESSIONAL

FIGURE 3

While different countries assign different prestige and monetary status to different job categories, those jobs of low prestige and monetary status are predominantly held by women. Thus in the U.S.S.R., the job category of physician is not considered to be a profession as it is in Canada, whereas the teaching of medicine is highly respected. It is not surprising, therefore, to discover that 75% of the doctors in the U.S.S.R. are women but that professors of medicine are male.

Likewise, in Canada, the jobs that women perform are the jobs which have low prestige and monetary status. In this country, the jobs in which women predominate in the work force are similar to the roles which women play in the home.[2] At the same time, women have been historically discouraged from participating in the occupations in which men predominate, and they continue to be discouraged from participating in them at the present time.

It must also be noted that even when men and women do share an occupational category, there is a further segregation by sex, with men holding the more highly paid positions within that category.

Examination of the occupational structure within the Alberta Public Service reveals the same configuration as described above. Within the configuration, both patterns (segregation by occupation and segregation within occupations) are readily visible. That is, not only does sex-segregation occur according to job categories for 31% of the Public Service, but for the remaining 69% who hold positions in integrated categories, sex-segregation occurs according to job level.

It is now generally established that occupational segregation is discriminatory to women since it restricts both their access to positions of responsibility and their potential for earning. Therefore, central to this section of the present study was the examination of the official personnel policies for recruitment, selection and promotion in order to determine if the segregation which occurs is the result of formal, discriminatory mechanisms.

A number of documents necessary for the study were provided by the Personnel Administration Office. These included: the Official Pay Plan, Regulations Governing Personnel Administration and Management, Management Personnel Systems, Position Specifications Manual, Organizational Structure, the Individual Rights Protection Act, the Master Agreement and the Individual Bargaining Unit Agreements. As well, such Public Service forms as Application, Performance Appraisal (several examples), Position Description and Competitions were made available.

A range of statistical data was provided as well. These data include: breakdowns of occupations and divisions by sex, breakdowns of occupations and management families by salary; information on training activities within the Public Service for a three month time frame; summaries of applicant flow, data on termination and summaries of selected competitions. Adequate data on reasons for termination and on the educational background of employees were not available. Termination was not a focus of the study but the closely related area of past and future career interruptions was probed by the survey and is discussed in that section of the report. Detailed information on educational background was elicited through the survey and is discussed in the Survey section as well.

APPROACHES TO ELIMINATING THE EFFECTS OF DISCRIMINATION

Prior to a discussion of specific Alberta Public Service policies and procedures, it is useful to establish a frame of reference and to define some of the terms which will be employed throughout this report.

In Canada, both the federal and the various provincial Public Services have a history of legislated discrimination against women. Some of the legislation precedes World War 1. Other discriminatory measures, such as the requirement that married women resign from the Federal Public Service, were re-introduced after World War II. During the past ten years, in response to pressure from women and from human rights legislation, both levels of government have eliminated most of these formal, discriminatory mechanisms. However, some jurisdictions have recognized the need for measures which move beyond the simple deletion of discriminatory legislation.

There are three types of regulatory measures available for the purpose of equalizing opportunities for women. The first, and least effective, by itself, can be called "passive non-discrimination measures" which involve the removal of formal or systemic discriminatory mechanisms. The second approach can be described as "limited measures". Examples of both approaches can be seen in the Alberta Public Service. An example of passive non-discrimination concerns the participation of married women in the pension plans. Although married women hired prior to 1972 are not required to opt into the plan even now, all new hires since 1972 participate in it regardless of marital status, as a condition of employment. As well, until recently eligibility lists were maintained on the basis of sex, whereas they are now integrated. A further example of this "limited measures" approach is the integration of seniority lists by Air Canada and the use of the title "flight attendant" to replace the older designation of steward and stewardess.

Measures of this second type are slightly more effective than simple passive non-discrimination. However, neither of these measures are very effective in improving the position of women in an organization. The reason for the general failure of these measures is that they merely eliminate disabling factors without replacing them with enabling factors that can overcome the results of past discrimination as well as the inequalities which derive from the broader social context. Likewise, neither measure addresses the informal discriminatory mechanisms which may persist in the face of formal equality.

The third approach is called "active measures". Such measures accept as a first premise the concept that equal access to opportunity is only advantageous to individuals who are actually (as opposed to potentially) equal. The second premise of this approach is that, because of past discrimination and differential socialization, some groups in the population are not actually equal at a given time and, therefore, require special measures if they are to achieve equal positions. In short, there is a recognition of the need for enabling factors to be instituted as well as for disabling factors to be removed. A corollary of this approach is that the active measures are only necessary until actual equality exists while passive non-discrimination and limited measures must be permanent. Enabling, or active, measures are usually referred to as Affirmative Action and are generally regarded as holding the greatest potential for success in providing women equality of status.

American Affirmative Action programs for visible minorities have already proven to be successful in eliminating the salary gap between White and Black males.[3] The programs for women have not been in existence for as long a period of time, but are expected to be as successful eventually. On the other hand, the Canadian Government's Equal Opportunity program which is restricted to passive non-discrimination and limited measures, has not improved the status of women civil servants. In fact, the status of women employees in some occupational areas has deteriorated over the three years of the Equal Opportunity Program's existence.[4]

Careful examination of the Alberta Public Service's policies and procedures reveals that equal opportunity has been limited, on the whole, to passive non-discriminatory mechanisms. There is no longer evidence of formal discriminatory mechanisms, which were doubtless removed to meet the requirements of the Individual Rights Protection Act. As well, a few types of limited measures (equalizing pensions and benefits, holding workshops for support staff women, integrating eligibility lists) have been implemented. However, the most visible feature of the Alberta Public Service's policies is their neutrality.

INTERNAL RECRUITMENT

Public Service policy requires that positions in the Service be filled on an in-house basis as often as possible. According to the policy manual, the objective of recruiting internally is to build a "career" civil service and to motivate and reward employees. To this end, "limited" and "departmental" competitions are favoured in the regulations. In practice, "open" competitions (external recruitment) and "closed" competitions (appointments) are quite frequent.[5] Female respondents to the survey questionnaire and the interview often commented on these practices and reported that they had been overlooked for positions for which, they believed, they were qualified. It must be noted that recruiting externally and filling positions by appointment are widely believed to have a measurably negative impact on women employees. This occurs because women as employees are often overlooked in favour of male applicants from outside of the organization. To avoid this, Affirmative Action programs (in Canada and in the United States, in the private and public sectors) routinely require an increased reliance on internal recruitment.

Although times of expansion in organizations are often considered optimal for improving women's status, a so-called "austerity" measure such as internal recruitment can prove to be of benefit to women. This occurs because internal recruitment requirements always increase the extent to which women are more easily perceived as suitable candidates. As well, internal recruitment requirements often provide the impetus to eliminate underutilization of women employees.

Documentation of the extent of underutilization of women was not a specific focus of the present study. Nevertheless, the survey findings and the organizational data provide enough information for discussion of the issue. Underutilization is defined in two ways: one, having fewer women in a particular job category than would reasonably be expected by their presence in the relevant labour market and, two, employing persons in jobs that do not make adequate use of their skills and training. Related to underutilization is the concentration of women in particular job categories which then become identified with the sex of the employee.[6] It is clear from the survey findings as well as from the information provided by the Personnel Administration Office that there is both extensive underutilization and concentration of women into specific job categories in the Alberta Public Service.

As will be discussed in a later section of this chapter, women are over-represented in some occupational categories and under-represented in others. It will become evident from the survey results that women are not promoted through the levels within an occupational category to the extent that their qualifications warrant. Present levels of education and years of service already qualify many women for promotion or lateral transfer into other job streams. Further, the degree of 'willingness' (as documented by the survey) that women demonstrate in their attempt to upgrade themselves, is exceptional. If these factors were combined with an increase in internal recruitment, both under-utilization and sex-segregation by occupation and level would begin to atrophy. At the present time, however, Alberta Public Service policy relating to internal recruitment is at the level of passive non-discrimination.

SELECTION CRITERIA

It is the policy of the Alberta Public Service that "selection shall be on the basis of merit". Both the Regulations Manual and the Public Service Employee Relations Act state that the most suitable or meritorious person should be chosen for appointment or promotion. Theoretically, this could be interpreted to mean that, when eligibility lists are established, one individual could be placed ahead of another who has more seniority, on the basis of merit. Therefore, strict application of the merit principle could be of benefit to women employees since the majority of women in the Alberta Public Service have less seniority than the majority of men. This is especially the case in job categories which women are just beginning to enter. American Affirmative Action Programs have been able to use legislation which permits the use of the merit principle to eliminate, when necessary, the primacy of seniority:

> "Seniority systems which perpetuate a discriminatory effect on formerly excluded or segregated classes must be changed so that persons who have suffered discrimination are restored to their rightful place -- the place they would have enjoyed had no prior discrimination existed."[7]

The legislation ensures that job categories which have been integrated only recently do not become segregated again by firing first those employees (women and minorities) who were hired last. It can also be seen that merit points are awarded for the personal characteristics of sex and race as well as for seniority.

Merit has been defined as a "system by which appointments and promotions in the civil service are based on competence rather than political favouritism".[8] While ostensibly objective, in practice, merit typically includes subjective components.[9] An example of subjective application of the merit principle can be found in an Alberta Public Service form which is used in the selection of in-service candidates. Under the heading of COMPATABILITY, candidates are assigned points for such items as "poise, tact, motivation, social outlook and adjustment" among others. These items are almost impossible to judge objectively. In fact, the merit system is never free from current social attitudes and perceptions about equality, competence and suitability for jobs,[10] and is unlikely to be applied as objectively as its proponents would wish it to be.

However, even the most objective application of the merit principle can never be viewed as more than a "limited measure" to improve the position of women. This is so because, due to the inequalities resulting from past discrimination and socialization, merit tends to function to maintain the status quo. Therefore, to shift utilization of the merit principle from a limited to an active measure requires the addition of a new qualifying factor. That addition is the assignment of extra points for what was previously counted as a disqualifying factor, namely, being female. In the same way that emphasizing the merit principle can overcome the strictures resulting from the strict application of seniority, so this modification can overcome any stricture found in the usual application of the merit principle itself. This does not imply suspension of the merit principle, but rather, an addition to it which benefits women.

In Canada, the best example of success with this type of modification of the merit principle comes from the attempts of the Federal Public Service to improve the position of Francophone employees. In 1964, the rate of Francophone participation in the Public Service was 12%. The rate remained nearly constant until the 1960's, at which time the Public Service embarked on a program to improve it. By 1976, using only this modified application of merit and without resorting to a quota system, Francophone participation had reached 26%. That ratio is in almost exact proportion to the percentage of Francophones in the population. Moreover, 20% of the Senior Executive category had become Francophone.[11] This impressive result was achieved because the concept of more balanced ethnic representation was incorporated into the merit system and the previously negative factor of "being a Francophone" was transformed into one of the positive criteria in favour of a candidate. This example demonstrates that commitment to merit selection and to the improvement of status for a disadvantaged group can exist in harmony.

Currently, Public Service policy tends to favour merit over seniority. However, there is no suggestion that the present policy or a modified merit policy be utilized to improve the position of women.

SELECTION PANELS

The introduction of selection panels is a further attempt to increase objectivity in the selection process. The rationale for establishing such panels has been that they provide for balance and effectiveness in the job interview and, in doing so, amplify the potential for objective evaluation of the candidate. Since panels involve a greater number of people directly and simultaneously, it was thought that personal and irrelevant prejudices would be counter weighted and that the ultimate decision would thus be based solely on the job-related merits of each candidate. Again, the philosophy is sound, but the application is difficult to achieve.

This is so because, even when discriminatory mechanisms are removed from organizational policies, any biases shared by the people who implement the policies still remain. In fact all people, and therefore all interviewers, have biases which affect their decision-making. These biases may be conscious or unconscious. They only constitute a problem in selection panels if a number of people share the same bias and this results in the rejection of a candidate for reasons which are not job-related. Since it is known that bias against women is present to some extent in most individuals, the criteria of objectivity and merit selection may not always be met.

The Alberta Public Service has numerous policies concernint the structure of selection panels and the manner in which interviews are to be conducted. However, since this policy does not contain specific equal opportunity provisions, the Public Service is again operating at the level of passive non-discrimination. A number of steps are required to move present policies to the level of active measures". These include reviewing and revising applicant pre-screening procedures to ensure that none of the criteria have a disproportionate effect on women; ensuring that there is female representation on each selection panel and providing sensitivity training to all employees who are likely to be members of a selection panel.

JOB BULLETINS

The display of Job Bulletins is now usual within the Public Service. This practice is commonly instituted to increase the applicant flow of in-service employees through informing all potential candidates of the vacancies which exist. Since traditionally women have not had access to the informal network where job information is shared, the increased utilization of Bulletins is of potential benefit to them. The survey findings indicate that women often consult the Bulletins. The practice of posting Bulletins can be characterized as a further example of "limited measures" in which the Public Service is engaged.

At the present time, Bulletins are not worded to indicate preference for either one sex or the other. However, neither do they contain specific statements to indicate that all positions are open to both male and female candidates. This language has been successful in actively encouraging women to apply for a greater variety of positions. The United States Civil Service Commission reported in 1976 that the use of such wording resulted in increased applications from women.

Job Bulletins are based on Position Specifications and, therefore, should carefully reflect the requirements outlined in those Specifications. At the time the present study was begun, the Alberta Public Service was in the process of revising its Specifications Manual. Such a task involves detailed job analysis. Many organizations report that when they undertake a review of this type, they routinely discover that many of the education and experience requirements are, in fact, inflated. Once it is agreed that the only requirements should be those which are actually necessary for adequate job performance, qualifications can readily be made more realistic. This ensures that a larger number of women will be able to qualify for a broader range of positions.

PERFORMANCE APPRAISAL

While many organizations only evaluate employees at the supervisory and management levels, the Alberta Public Service ensures that all employees participate in the Performance Appraisal process. Workshops are held to train supervisors to conduct the appraisal interviews. Again, the purpose is to increase objectivity, this time in the area of assessing performance, so that the potential of each employee can be developed to the fullest.

A variety of forms have been developed which help to structure the appraisal interview and which record the goals of both employee and supervisor for the next appraisal period. The forms vary in both length and complexity. It may be that this variety was developed to provide supervisors with flexibility or that certain forms are considered more appropriate for specific job categories. Whatever the original intent, a probably unexpected side-effect can be hypothesized which likely has a negative impact on female employees.

It is likely that the more complex forms such as PAO 701 and 702 are used to assess incumbents in the more demanding job categories, while a simpler form like PAO 703 is used to evaluate incumbents in the more routine categories. If this is the case, then the 701 and 702 are more likely to be used for managerial or supervisory positions or for categories which lead to these positions. Conversely, it is likely that PAO 703 is used with clerical/secretarial positions. Should this be so, then it is likely that more male employees would be assessed via the 701 and 702, while more female employees would be evaluated via the 703.

Examination of these forms indicates that both PAO 701 and 702 are directed toward the future growth and development of the employee, while PAO 703 concentrates on helping employees to increase skills in their current position. In short, the first two forms may be called future-oriented (directed toward development) while the last form is more aptly described as present-oriented (directed toward training).

If the forms are indeed used in the manner suggested, they would tend to subtly guide employees in certain career directions, and, at the same time, perpetuate the present segregated position of males and females in the Public Service. One measure which could overcome this tendency would be the development of a comprehensive appraisal form to be used for the evaluation of all job incumbents.

OCCUPATIONAL SEGREGATION

The recent dramatic increase in women's participation in the work force (from 29% in 1962 to 46% in 1977) has not resulted in the expected, concomitant improvement in women's economic status. After more than a decade of equal pay legislation in Canada, the female/male salary discrepancy which the laws were intended to correct, continues. In fact, not only has the discrepancy remained almost constant in terms of percentage, but in terms of salary it has actually increased. One reason for this is that although women continue to increase their numbers in the work force, they do so in the traditionally poorly paid, sex-segregated areas. As well, women are not equally compensated even when they perform the same work as men.

Before discussing how segregation by occupation affects women's salaries, it may prove helpful to outline present equal pay legislation. By definition, provincial equal pay laws are applicable only when men and women perform the "same or substantially similar" work. Since this is rarely the case, "equal pay for equal work" has not been a particularly successful legislative measure. Dissatisfaction with the current law has generated much interest in the concept of "equal pay for work of equal value". This language has been adopted into the Canadian Human Rights Code and is under review in some provinces. Proponents believe that the extended scope of this language will prove effective in eliminating salary discrepancies because there is no requirement that men and women perform the same work before the law can be applied. Rather, jobs would be evaluated against each other, using such criteria as skill required, qualifications and level of responsibility.

Since this study concurs with the findings of other researchers that equally qualified women doing equal work are not paid equally, it can be surmised that the equal pay statutes in the provinces are not being stringently enforced. Even if enforcement were strict, not many women would benefit because they do not perform the same work as men. Should "equal value" laws be implemented, the possibility of a more positive impact on women's salaries would increase.

However, it is difficult to know how effective equal value legislation might be. It is not an easy task to equate one job with another, or one skill with another. Should analytical skills be better compensated than technical expertise? Is programming a computer worth more or less than managing the word processing centre? Can one employer compensate differently than other employers, and does this imply that no employer can implement the equal value concept until all others are willing to do so? Until these issues are resolved, it is sensible to attack job segregation directly. In fact, even if equal value legislation is universally adopted, it will still be necessary to eliminate job segregation.

Job segregation has been a problem for women for as long as they have been in the Canadian work force. "The segregation of women in specific industries and occupations characterized by low pay, low skill requirements, low productivity and low prospects for advancement has shown remarkable stability throughout this century."[12] Figures for Canada as a whole for 1978 demonstrate that the largest number of women continue to be employed in very few occupations. The clerical (34%), sales (10%) and service (18%) cluster still accounts for 62% of all working women. In comparison, men do not comprise more than 11% of all male workers in any of the occupations in which they are employed (see TABLE 3).[13]

This same pattern of segregation by sex is found in the Alberta Public Service (see TABLE 4). 67% of the women are in Business and Clerical occupations, with most of the remainder in Professions and Social Service jobs. Men, however, are found in significant numbers in most occupations.

It can be noted from TABLE 3, that twice as many men as women occupy managerial and administrative positions throughout Canada as a whole. Within the Alberta Public Service, more than 90% of managers are male. Thus, sex segregation occurs both by occupational category and by level within a given occupation. Occupational groups were excluded from the survey if incumbents were predominantly of the same sex. Thus, Groups 5 through 9 (see TABLE 4) were excluded on this basis. However, even groups retained within the survey show some degree of sex segregation. Group 1 (Business and Clerical), for example, is 85% female but there were sufficient male incumbents to include the group in the survey sample.

Segregation by level is easily discernible within the Business and Clerical group. For example, only .06% of Clerks 1 and II but 64% of Clerks V are male. 89% of Court Reporters 1 are female, but 100% of Court Reporters III are male. This same pattern appears throughout the other occupational groups in which there are significant numbers of both women and men.

TABLE 3

Percentage Distribution of Men and Women

By Occupational Group, Canada - 1978

OCCUPATION	% Women in Category	% Men in Category
Managerial & Administrative	4.5	8.7
Natural Sciences, Engineering & Mathematic	1.0	4.7
Social Sciences	1.9	1.1
Religion	.1	.4
Teaching	6.0	2.9
Medicine & Health, Artistic, Literary & Recreational	1.3	1.4
Clerical	34.0)	6.5
Sales	10.0) 62.3%	10.4
Service	18.3)	10.0
Agriculture	2.9	6.1
Fishing, hunting, trapping	-	.4
Forestry & logging	-	1.1
Mining & quarrying	-	.9
Processing	2.0	5.1
Machining	.4	3.9
Product fabricating, assembling & repairing	5.4	11.3
Construction trades	.2	11.5
Transport equipment operation	.4	6.5
Materials handling	1.3	3.4
Other crafts & equipment operating	.6	1.9
Unclassified	1.1	.4
All Occupations	100.0	100.0

TABLE 4

Occupational Distribution of Women and Men in the Alberta Public Service

GROUP [a]	% Women	% Men
1. Business and Clerical	67.0	8.0
2. Professional	15.0	30.0
3. Social Service	10.0	9.0
4. Technical	2.0	11.0
5. Regulatory	.20	2.0
6. Corrections	.02	1.0
7. Natural Resources	.40	8.0
8. General Inside Worker	6.0	6.0
9. Construction and Trades	.2	24.0

[a] These occupational groupings are similar to, but not identical with the groupings used in the survey. The groupings used here include some specific positions which were sex-segregated. These positions were not included in the survey sample.

There are many historical reasons for segregation both within and outside the Alberta Public Service. Society continues to replicate the family division of labour according to sex by projecting this division into the workplace. However, the major reason for occupational segregation is the on-going belief that women workers are a reserve labour pool whose attachment to the workforce is marginal.[14] This view of the female worker may have been a true description at one time, but is no longer valid today.

In fact, the female labour force continues to grow. The size of the male labour force has increased by 25.9% over the past decade, but the increase in the female labour force over the same period was 65%, or more than twice the rate of increase for the female population.[15] Not only are more women working than ever before, but they have a work-life expectancy of more than thirty years.

The survey results document that financial necessity is one of the strongest motivations for women to remain in the work force. In the Alberta Public Service more than 70% of women employees provide either an equal, major or sole share of their families' support.

However, segregation by occupation makes it more difficult for women to meet their financial obligations. This can be documented by examining the earnings of male and female-headed families. In 1976, male-headed families in Canada had an average yearly income of about $19,000 but the average yearly income for female-headed families was just over $10,000.[16] Thus, it can be seen that women bear a severe financial burden both due to segregation by occupation and segregation by occupational level. This is true for Canadian women in the work force and for women in the Alberta Public Service.

However, the female response to the survey indicates that the Public Service can count among its employees an exceptionally large number of women employees who would welcome the opportunity to up-grade their position in the organization and thereby increase their earnings. How the Public Service can facilitate this is discussed next.

OCCUPATIONS WHICH WOMEN COULD PERFORM

As stated before, the salary differential measured by the survey refers to those employees who hold sex-integrated positions. However, a further type of salary discrepancy requires examination. This differential occurs because of segregation by occupation.

Within the Public Service, salary is calculated on the basis of several factors such as requisite qualifications, experience and job duties. Extensive study of the positions within the Public Service, the salaries allocated to them and the sex of the position incumbents, reveals some curious anomalies. Although it is clear that the sex of employees is not used directly to establish individual salaries, it is apparent that "women's" jobs are paid less than "men's" jobs. This is so even when the qualifications and duties of women's jobs are either equally extensive or more extensive than those of men.

A comparison of the Nurse III and Fish and Wild Life Culturist IV positions serves as an example. The Culturist category is an all male one, while the Nurse III category is 91% female. Both positions require experience. Grade 12 is a requirement for the Nurse, but not the Culturist. As well, the Nurse position requires a graduation from an approved nursing school, while the Culturist must graduate from a Community College program in Natural Resource Technology However, the Culturist position pays $780 more per year. (All figures represent maximum salaries from 1977 pay schedules.)

Other comparisons provide even more startling examples. A Driver Examiner II must have completed Grade 12, have an accident-free operator's license for all motor vehicles and, at higher levels, increased experience and a certificate in driver education. This all-male category is paid a maximum monthly salary of $1150. Estates Investigator, an all-male category, is an entry level position requiring Grade 12 but no experience. The maximum salary per month is $1110. The entry level category of Park Ranger is 95% male. A two-year technical diploma is the only requirement and the monthly salary maximum is $1107.

All of these salaries exceed that of Medical Records Librarian, which is an all-female category. The entry position for this category requires experience in medical terminology and coding, senior matriculation, teacher training or graduate nurse training plus a diploma course for certification as a Medical Records Librarian. The maximum monthly salary for this position is $1052.

An example from California shows that the problem of under-paying women is a common one: Librarians (female) in Montgomery County earn $13,000 to $18,000 per year, while liquor store clerks (male) earn from $23,000 to $29,000.[17]

While numerous other examples can be found (clerk, clerk-typist, stenographer or keypunching positions vs. trades, technical and maintenance positions), these are sufficient to illustrate the salary difference between male and female job areas.

Further comparisons illustrate salary differences when the segregation is by occupational level. First is the Court Reporter category. 89% of Court Reporter I positions are filled by women. Their maximum monthly salary is $1273. However, 100% of the Court Reporter III category is staffed by men. Maximum salary per month for this position is $1483.

The management category provides evidence of occupational segregation both by level and by category. Although managers were included in the survey, management in fact illustrates every aspect of the occupational segregation process. It has already been noted that more than 90% of Public Service managers are male (about 2300 men and 175 women as of March, 1978). Females within the category are clustered at the lowest levels (see TABLE 7, Management Interviews). Further, the largest number of women managers occupy positions in the management families which are traditionally considered suitable for women: Social Sciences (50), Education (31) Natural Sciences (26) and General Administration (50).

Not surprisingly, management positions staffed by women are not compensated as well as the positions which are exclusively filled by men.

Numerous positions can be suggested into which women could be moved. In addition to the specific examples discussed above, TABLE 4 suggests whole categories of jobs from which women are now virtually absent: Regulatory (Estate Investigator, Labour Standards Officer), Natural Resources (Agricultural Officer) and the Trades. There are other categories which already contain some women, in which the percentage could be increased (Professional and Technical). As well, women could be moved into the higher levels of several job streams including, of course, management.

JOB STREAM ANALYSIS

The final section of the Organizational Analysis component is Job Stream Analysis. This section involved collecting in detail the employment background and educational history of the managers who participated in the management interviews. The information was analyzed in order to identify the major paths to management positions within the Alberta Public Service. As well, the information was expected to help in exploring further the effects of occupational segregation. In-depth interviews were conducted with 37 male and 33 female managers. (Complete results of the interviews are found in the Management Interviews section of this report). The education and work experience histories of an additional 32 male managers was also included in the Job Stream Analysis.

Respondents were asked to enumerate all the jobs they had ever held, both within and outside of the Alberta Public Service. The results of this examination corroborated many of the findings to be discussed from the survey. First of all, male managers had a more extensive work history than did the women managers. 51% of the men, but only 36% of the women, had held six or more jobs. As is also found in the survey results, the male managers as a group are older, have been working for a longer period of time and have had fewer (but more often job-related) interruptions in their careers.

The occupational group from which each manager had come was identified by analyzing his or her job and education history. It seemed likely that a large number of managers would come from the Professional group and this was confirmed by the data. However, it was also important to determine if there were other occupational groups which generated significant numbers of managers, and if these were ones which were sex-segregated.

In fact, 84% of the male managers were from the Professional groups, as were all of the female managers in this sample. The remaining 16% of the male managers were scattered among the other occupational categories. This result is confirmed by the survey sample. Of the 641 managers who responded to the questionnaire, 73% came from Professional backgrounds, 11% were from Business and Clerical positions, .6% from Social Service, 1% from the Technical category and 14% were scattered among all other occupational groups.

It is often said in the large, private sector corporations that senior management is developed from "line" positions. The implication is that, until women acquire line experience, they will not advance in the corporate hierarchy. However, this may be changing, since university credentials are becoming more important in business. Certainly in the Alberta Public Service, the best route to management appears to be through education. Although the men in this sample have acquired both years and variety of experience, the most important criterion for their success appears to be obtaining professional credentials. As will be discussed in the Survey Section, education accounts more for the amount of an employee's salary than does experience. If more women hope to advance in the Public Service, they must continue to acquire educational credentials. Their response to the survey indicates that they are willing to do so.

However, the important finding from the Job Stream Analysis is that women are not barred from management by occupying the wrong occupational categories. Although there are fewer women in Professional jobs than men, their numbers are substantial and they should constitute a sufficiently large pool out of which significant female movement into management could be encouraged.

FOOTNOTES/ORGANIZATIONAL ANALYSIS

1. C. Brassard and T. Nash, Women at the National Film Board: An Equal Opportunity Study. Ottawa, National Film Board, 1978.

2. H.T. Schrank and J.W. Riley, "Women in Work Organizations." in Kreps, J.M. ed. Women and the American Economy. Engle-Wood Cliffs, N.J., Prentice-Hall, 1976.

3. "Men Still Ahead U.S. Survey Says". Globe and Mail, November 21, 1978.

4. Advisory Council on the Status of Women. Women in the Public Service: Barriers to Equal Opportunity. 1979.

5. Personal conversation.

6. United States Equal Opportunity Commission, Voluntary Affirmative Action. Washington, D.C. E.E.O.C. 1978.

7. Ibid.

8. Webster's New Collegiate Dictionary. Chicago, English Language Institute of America, 1977.

9. F. Hirsch, The Social Limits to Growth. U.S.A. Harvard Paperbacks, 1978.

10. Advisory Council on the Status of Women. Women in the Public Service : Barriers to Equal Opportunity. 1979.

11. V.S. Wilson and W.A. Mullins, "Representative Bureaucracy: Linguistic/Ethnic Aspects in Canadian Public Policy" Canadian Public Administrator, Winter, 1978-79.

12. P. and H. Armstrong, The Double Ghetto. Toronto, McLelland and Stewart, 1978.

13. Statistics Canada, Income Distribution by Size in Canada, 1976 (Catalogue 13-207, Annual, Table 42).

14. P and H. Armstrong, The Double Ghetto. Toronto, McLelland and Stewart, 1978.

15. Courtesy of Ontario Women's Bureau.

16. Ibid.

17. "The Shoot-Out Over Equal Pay for Women". Los Angeles Herald Examiner, April 25, 1979.

* Merit principle discussion aided by Federal Advisory Council.

SURVEY OF EMPLOYEES

Central to this examination of the status of women employees in the Alberta Public Service is a survey of approximately 3600 males and females who work in sex-integrated job categories. The purpose of the survey was to determine which job-related characteristics and qualifications of employees have the most impact on advancement and which are most important in accounting for the differential status of women and men within the organization. The survey was also designed to determine whether being female was associated with an additional disadvantage over and above that accruing from differences in characteristics and qualifications. Thus, the survey addresses the issue of whether women are directly denied advancement because of their sex.

The Survey findings will be integrated with the findings of the components on Organizational Analysis and Management Interviews in the Discussion section of this report.

THE QUESTIONNAIRE

In the development of the questionnaire, a number of factors were identified which were considered to be important to the advancement of employees within an organization such as the Alberta Public Service. Identification was based on previous research and on discussions with representatives of the Alberta Human Rights Commission and the Personnel Administration Office. A draft questionnaire was produced and subsequently revised following further discussions with the same groups. The second draft of the questionnaire was piloted by Personnel Administration Office staff using a sample of 45 employees of the Public Service who were attending a government-sponsored Career Development workshop. Their responses and comments led to a number of additional revisions.

The final form of the questionnaire appears as Appendix A. The Specific items and the manner in which they were scored and analyzed will be discussed below in conjunction with the results. In addition to Demographic Characteristics (age, sex, marital status, number of dependents), information was collected on two groups of variables. The first includes various types of Qualifications which would be expected to affect career success rather directly. They are as follows:

- Formal Qualifications: level of training at the secondary and post-secondary level.
- Employment History: number of years and type of work experience.
- Job Performance: level of performance on the job.
- Applications: the extent to which employees have applied for advancement.

The second group contains a number of more subjective variables whose effect would tend to be more indirect:

- Family Responsibilities: the amount of time spent each week on household and child-care duties.
- Career Committment: the extent to which employees are committed to working and advancing within their field.
- Mentoring: the extent to which employers had encouraged the respondent to obtain further training and to seek advancement.

Information was also collected on the current position employees hold, and on their attitudes toward women in the work force:

- Position: an employee's current degree of success on the job as measured by salary and supervisory responsibilities.
- Attitudes Toward Women in the Work Force: the extent to which employees viewed women as competent workers, and as suitable for advancement, and the extent to which they approved of Affirmative Action programs for women within the Alberta Public Service.

SAMPLE

The sample was designed to provide a comparison of the vertical mobility of men and women in the Alberta Public Service. For this reason, employees were only included if they held positions occupied by both men and women. This means that a large proportion of the work force (about 31%) was omitted from the sample because they occupy positions in sex-segregated occupations. Only full-time workers were included.

The barrier to women in these sex-segregated jobs appears to be at the entry level and is the subject of the previous chapter. The survey focuses on the remaining 69% of Public Service employees who occupy a diversity of sex-integrated jobs.

Because of this diversity, it seemed useful to separate the workforce into occupational categories, since the dynamics of advancement for the group as a whole, and for men and women separately, might differ from one type of occupation to another. Although any grouping is to some extent arbitrary and can obscure important differences among jobs, several broad groupings can be identified which have some coherence. These groupings were chosen because they require somewhat similar levels and types of training. They include related occupations at different levels through which employees can advance as they accummulate work experience, obtain further credentials and demonstrate high levels of performance. These occupational groupings are similar to ones frequently used to describe the work force and have been used by other researchers. The groupings and the specific jobs included in them were developed after a thorough study of the job specifications used within the Alberta Public Service and the composition of the various bargaining divisions.

Four occupational groupings were developed and a description of each follows:

1. BUSINESS AND CLERICAL

This category is comprised of a large group of occupations. All jobs included in it require business-oriented training or experience for entry. Secondary school education is required for the entry level and post-secondary training is sometimes required for advancement. Most employees holding these jobs are included within Bargaining Division 1 (Administrative Support), with a fairly large group from Division 2 (Administrative and Program Support), plus a few from the Opted-Out and Excluded Category. Representative jobs included in this grouping are: clerk, clerk-typist, stock-keeper, keypunch operator, judicial clerk, stenographer, land titles writer, buyer, personnel load officer, and secretary. There were, as of March, 1978, 1259 men and 8739 women within this group.

2. PROFESSIONAL AND SEMI-PROFESSIONAL

This category includes occupations which require post-secondary training, either general or professional in nature. The jobs themselves mainly involve working with people and/or information. Employees in this group are mainly from Division 2 (Administrative and Program Support), Division 6 (Social Services) Division 8 (Educational Services) or Division 10 (Medical and Rehabilitative Services). A few jobs from Division 1 (Administrative Support) and the Opted-Out and Excluded categories are also included. Representative jobs are: librarian, information officer, planning officer, rehabilitation counsellor, social worker, teacher and personnel administrator. A number of semi-professional classes were not included in this group because they contain few women. These included all such classes in Natural Resources (Division 5 - for example, biologist, forester, meteorologist), and many in the Opted-Out and Excluded categories (for example, engineer, architect and solicitor). As of the March, 1978 listing, there were 1700 men and 1844 women included in this group.

3. SOCIAL SERVICES

This occupational group includes non-professionals who provide direct care of a social or psychological nature. Post-secondary training is typically not required in order to enter this category. This grouping should not be confused with the Social Services Division

(Division 6) which is mainly composed of professional jobs. Most jobs included in this grouping come from Division 9 (Health and Therapy Support). There are also a few jobs from Division 1 (Administrative Support), Division 2 (Administrative and Program Support), Division 3 (Correctional and Regulatory Services) and Division 8 (Educational Services). Some representative jobs are: houseparent, institutional aide, therapy assistant, welfare hostel worker and corrections officer. There were 1176 men and 1224 women in this group as of March, 1978.

4. TECHNICAL SERVICES

Technical jobs generally require post-secondary training or experience of a technical nature. The work itself involves both a body of specialized knowledge as well as specific manual skills. Most employees included in this group belong to Division 12 (Technical Services). A few jobs in Division 1 (Administrative Support), Division 2 (Administrative and Program Support), Division 8 (Educational Services) and the Opted-Out and Excluded Category are also included. Representative jobs in this grouping include: library technician, educational lab technician, technologist, laboratory technician and land surveyor. As of March, 1978, 1364 men and 301 women fell within this group.

In addition to the employees in these groups, there are employees currently in management positions who began their career in one of the four basic groupings. As of March, 1978 there were approximately 2300 men and 175 women at the Senior Officer I and II and the Executive Officer I and II levels. It was impossible to identify the background of these employees in advance without access to confidential personnel files. However, an informed guess about the group from which the managers originated could be made by looking at the Management Family to which they belong.

Management is divided into nine Families but some of these - General Inspection and Regulation, Maintenance and Trades, Engineering and Architecture and Legal - were obviously outside of the range of occupations covered by the four basic occupational groups. Excluding managers in these families left a pool of 1876 men and 166 women in relevant management positions. The remaining managers are in the General Administrative, Audit and Data, Social Sciences, Natural Sciences and Education families. Although it was suspected that some managers in these positions may have come from backgrounds outside of the four basic groups, this could not be known in advance. The strategy adopted was to draw the sample from all managers in the five relevant families listed above and to collect additional information from respondents' replies to the questionnaire.

A special form of the questionnaire was developed for managers in which they were asked to indicate the occupational group from which they had come. This information was used to merge the management respondents back into the four basic occupational groups. Those who did not fit were removed from the sample. The question eliciting this information was as follows:

> Which of the following best describes the occupational group with which you most closely identify? (If you are currently in a general administrative position, indicate the type of position you held before being promoted to a management level.)
>
> 01. Clerical and Business - e.g. typist, stockkeeper business machine operator, accounting clerk, administrative officer, buyer.
>
> 02. Semi-Professional and Professional - e.g. librarian, research assistant, information officer, architect, accountant, auditor, social worker, psychologist, teacher, nurse, occupational therapist.
>
> 03. Social Services - e.g. corrections officer, houseparent, dean of residence, institutional aid.
>
> 04. Technical - e.g. arts instructor, land surveyor, museum technician, laboratory technician, photographer, electronics technician.
>
> 05. Regulatory - e.g. municipal inspector, assessor, property agent.
>
> 06. Corrections - e.g. patrol officer, sheriff's bailiff.
>
> 07. Natural Resources - e.g. fish and wildlife technician, biologist, forestry officer, park ranger.

08. General Inside Worker - e.g. institutional service worker, cleaning porter, caretaker, foreman.

09. Construction, Trades and Outside Workers - e.g. office equipment, mechanic, building superintendent, equipment operator, gardener, farm worker, agricultural officer, driver examiner.

10. Other ______________________________

The first four response categories correspond to the four occupational groups. Respondents who circled one of these were merged into the corresponding group. The remaining respondents were eliminated.

The sample population was also divided by age. Employees were sampled proportionately in the following age categories: 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, and 60 and older. Employees younger than 20 were not included. Since so many individuals in this last category are still in school, a sample of employees in their late teens would not be fully representative of their age group. Only the Business and Clerical group had such employees in significant numbers.

In addition, employees as young as this have not been in the work force long enough to have obtained advancement. Since the purpose of the survey was to examine vertical mobility, it did not seem useful to include them. Ideally, it might have been better to exclude all workers under 25 for the same reason. However, given the concentration of workers in the 20-24 age group, particularly in the Business and Clerical category, it was decided to begin the sample at age 20. To have excluded the 20-24 age group would have eliminated a large body of employees from the study and thus restricted the study's generality. It would also have reduced the size of the sample to below desirable limits in the Technical Services group.

TABLE 1 in Appendix B indicates the number of employees in each age category for each occupational group. Managers are listed as a separate group. A sample was drawn from each age/occupational group so that the group would be represented among the respondents with equal precision. The sample size was determined mathematically. For two segments of the sample - female managers and female technical employees - all individuals were included since there were so few. The total size of the resulting sample was 5,718. The sample was drawn according to these specifications in mid-June by the Computer Services Group of the Alberta Public Service.

A total of 641 managers responded and 552 were allocated to the four occupational groups on the basis of their response to the specific item of the questionnaire. The rest were eliminated from the study.

PROCEDURE

The procedure adopted for distributing questionnaires to the sample and obtaining the returns was designed to ensure the confidentiality of employee responses. When the sample was drawn, names and government addresses of the employees to be included were printed directly onto mailing labels. An identification number was also included so that employees who failed to respond to the original mailing could be followed up in a second mailing. However, no names were included on the questionnaire and the identification number could not be used to identify a respondent without access to the master list. The identification number included a digit which identified the occupational group to which the respondent belonged, a two digit code to represent the bargaining division and a unique four digit number to represent the individual respondent.

The labels and master list were sent to the consulting firm in Toronto. The envelopes were prepared there and returned to Edmonton for distribution through the regular government mail. In addition to the questionnaire, each envelope contained a letter which briefly described the purpose of the study and its sponsorship by the Human Rights Commission and the Personnel Administration Office. A stamped, self-addressed envelope was also included so that the questionnaires could be returned directly to the consulting firm.

The first mailing was received in Edmonton on June 19, 1978. Because of the size of the mailing, distribution was difficult and some employees received their envelopes a few weeks later than others. Replies were logged in and a second mailing was sent to non-respondents on July 15, 1978. By mid-September, all replies had been received and the questionnaires were keypunched.

RETURN RATE

Of the 5,718 employees in the original sample, replies were received from 3,612. This is a completion rate of 64%. However, 337 questionnaires were returned to the Human Rights Commission as undeliverable. This no doubt occurred as employees changed departments or left the government. If this is taken into account, the completion rate may be calculated over a reduced original sample size of 5,381 or 67%.

This is a very good return rate and, in fact, is higher than is usually obtained in surveys of this type. The size of the return rate makes it possible to generalize with confidence from the sample to the population as a whole.

ANALYSIS OF THE DATA

Analysis of the data retained the distinction among occupational categories and always examined the data and the interrelationships among the variables separately for each group. The same was true for age.

It is important to analyze age categories separately for two reasons. First, because society changes over time, people of different ages have been subject to different influences and it may be misleading to compare them as if no difference existed. For example, a man of 55 and a man of 30 are likely to have quite different attitudes, backgrounds and experiences, not solely due to age, but because they have lived through different portions of history. Second, because of the unique life history of women, at different ages, different groups of women are in the work force. A working woman of 25 may not have children. Or, she may be so highly committed to working that she has decided to continue to work even though she may have small children. Finally, she may be in economic need and must work, whatever her preferences might be. However, working women of 35 are more representative of women in society as a whole. Such women include those who have continued to work although they have small children, those who work but have no children and, most typically, a group who withdrew from the work force for a few years while their children were young.

For purposes of the analysis, the nine sampling age categories were collapsed into three composite categories; 20-30, 31-45, and 46 and older. These can be roughly characterized as representing the early (junior), middle and mature (senior) employment years. Each one is associated with a different but typical family pattern and, for women at least, a different level of family responsibilities. These ages might also be labelled the "pre-school", the "school age" and the "independent" family years.

Due to a change in the questionnaire, the age groupings upon which the analysis was based are somewhat different from those used to derive the sample. The latter were, 20-24, 25-29, 30-34, etc. The questionnaire divided ages at the "5's" rather than the "4's" position, that is, 21-25, 26-30, etc. The first age category on the questionnaire is "20 or younger". But since no one younger than 20 was included in the sample, the first age category for purposes of the analysis was defined as 20 through 30.

TABLE 2 in APPENDIX B, (Column 1) gives the estimated population size for each of the new age and occupational categories to be used in the analysis. Column 2 gives the returns for each group. As can be seen, there is a somewhat higher completion rate on the part of women and younger employees. The last column of the table indicates the "Effective Sample Size" of each group. This number represents the sample size from a statistical point of view. It reflects both the total population size for that group and the actual number of returns received. In interpreting any statistic, the effective sample size should always be kept in mind as an indication of the reliability of the data. Data from groups whose effective sample size is small should be interpreted with caution. Generally speaking the size of the sample is sufficient to allow us to generalize the findings to the population with confidence. The exception to this is breakdowns by sex within the Technical group. Because the sample size is small for this group, such generalization to the total population is less reliable.

This section describing the survey findings will begin with a discussion of the demographic characteristics of the sample - the age, and sex of employees in the various groups - and then proceed to Qualifications and employee Characteristics. Simple descriptive information will be presented first so that it can be seen how women and men differ on the various factors. More complex analyses will then be presented to assess the extent to which differences in Qualifications and Characteristics lead to differences in the level of position attained, and whether there are any remaining differences due to the sex of the respondents.

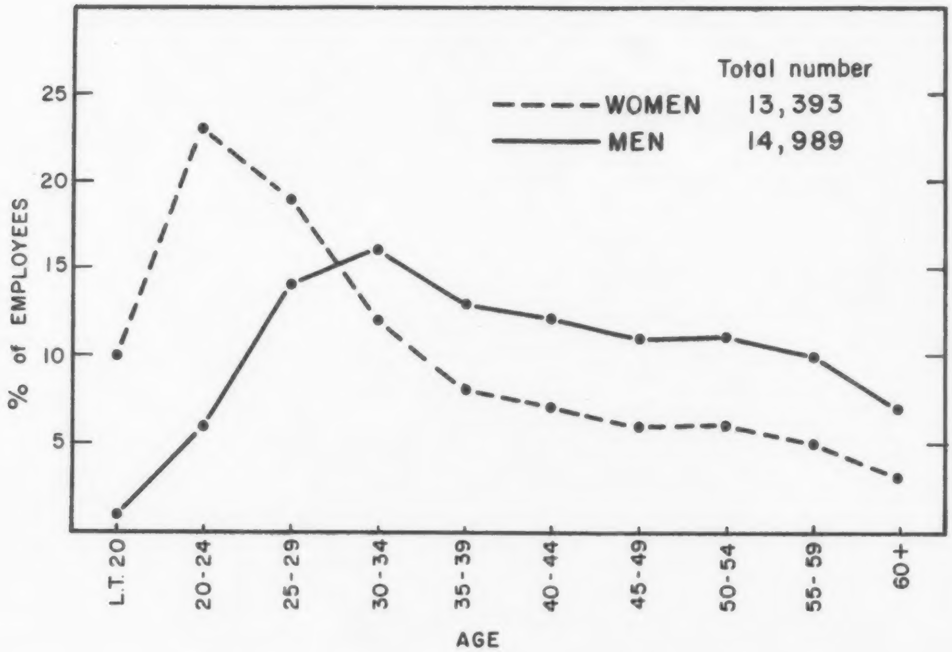
DEMOGRAPHIC CHARACTERISTICS

As can be seen in FIGURE 4, the work force of the Alberta Public Service is relatively young. FIGURE 4 also indicates that the work force is fairly evenly divided between women and men - 47% to 53%. This is somewhat atypical of the work force as a whole, which is roughly 39% female. The percentage of women in the Alberta Public Service peaks between the ages of 20-24, while the peak for men is not attained until 30-34.

The segment of the Alberta Public Service sampled for the survey was somewhat different. Within the sample population (which includes 19,649 employees), women predominate, accounting for 12,274 or 62%. This overall pattern is largely due to the inclusion of Business and Clerical employees, 85% of whom are female.

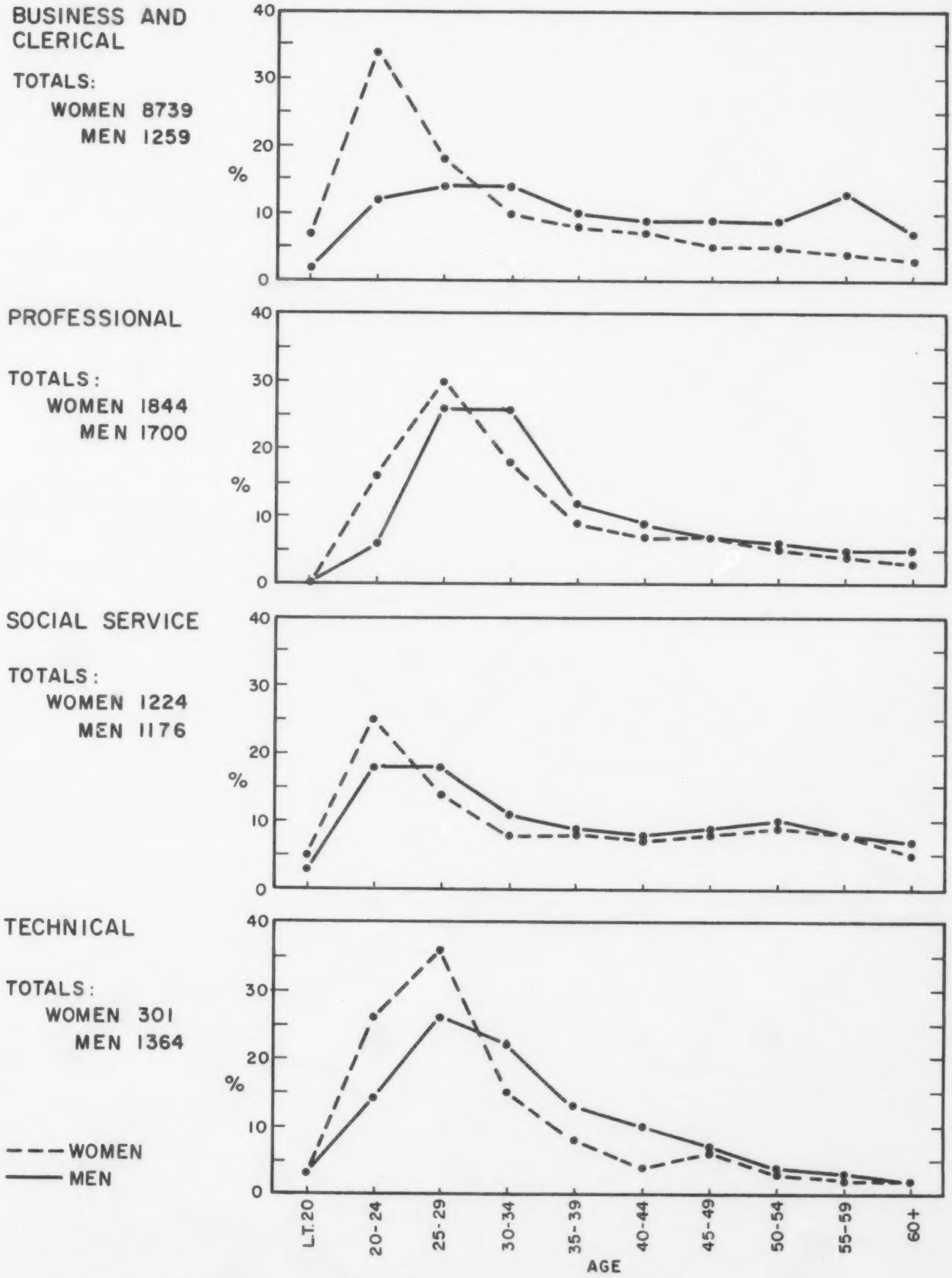
Women also predominate slightly in the Social Services category, accounting for 51% of the population. However, among the Professional group, women comprise only 38% of the population and, among the Technical group, a mere 18%. Nonetheless, the age distribution of women and men within the survey population generally mirrors that within the employee group as a whole.

As can be seen in FIGURE 5, within all four occupational categories women are concentrated in the younger age groups.[1] This is most striking in the Business and Clerical group, which is also where the bulk of female employees are found. Within



AGE DISTRIBUTION OF WOMEN AND MEN WITHIN THE ALBERTA PUBLIC SERVICE

FIGURE 4



AGE DISTRIBUTION OF WOMEN AND MEN IN THE FOUR OCCUPATIONAL GROUPS

FIGURE 5

the Professional and Social Service categories, the age distribution of male and female employees is more similar.

EDUCATION

A large section of the questionnaire was devoted to respondents' formal training (QUESTIONS I through N). Respondents were asked to indicate their level of public school education and their level of post-secondary education, including apprenticeship training, diploma and certificate programs and university courses. Respondents were also asked about courses they had taken which were not part of a formal program, but which were work related. These included single courses offered by a university, a private institution or by an employer, including the Alberta Public Service.

The data (see TABLE 5), indicate a high level of training throughout the Public Service as a whole. However, differences by sex are evident. Women are slightly more likely to have graduated from high school, and this is true for all occupational groups. Women and men are equal, overall, in the average number of years of training received at the community college level. In fact, more women than men have attended community college (48% vs 38%) and more have graduated (41% vs 32%). However, when men do attend community college, they tend to choose longer programs.

TABLE 5

Formal Education of Women and Men

	High school	Community College		University		Post Graduate		Other Courses	
	% graduated	% graduated	Average number of yrs.	% graduated	Average number of yrs.	% graduated	Average number of yrs.	Alberta Public Service	Other
Total									
Women	75	41	.8	10	.4	2	.1	.9	.6
Men	73	32	.8	35	1.6	17	.5	1.8	1.2
Business & Clerical									
Women	74	38	.6	6	.3	0	.0	.6	.4
Men	65	30	.9	12	.6	3	.1	1.4	.8
Professional									
Women	88	65	1.7	30	1.2	12	.4	1.8	1.5
Men	86	32	.9	61	27	36	1.0	2.1	1.7
Social Service									
Women	51	20	.5	5	.3	0	0	1.0	.3
Men	45	16	.4	6	.3	0	0	1.1	.4
Technical									
Women	90	59	1.3	23	1.0	5	.1	1.3	1.4
Men	77	45	1.1	21	1.1	4	.2	2.0	1.1

This overall pattern is not consistent across the various occupational groups. Professional and Technical women exceed their male counterparts in the level of community college training, while Business and Clerical women fall behind. But overall, at this level of training, women equal or exceed men.

At the university and post-graduate levels, however, the men overtake and pass the women. Men average 1.6 years of university training throughout the population, while women average .4 years. Men average more years of post-graduate and professional training (.5 years vs .1). Men have also taken more individual job related courses. This general pattern holds both for Business and Clerical and for Professional employees.

Thus, women appear as well qualified as men at the secondary and community college level, but not at the university and post-graduate level. Given this difference it is important to determine the relative value of these various types of training to advancement in the Alberta Public Service. An analysis was done which assessed the relative contribution of the various types of training to an employee's salary.

The results indicate that all education is not equal. TABLE 6 gives the weights resulting from the analysis, which describe the value of each type of educational credential.[2] As the TABLE shows, high school graduation yields one point.

TABLE 6

Value to Salary of Various Education Credentials

Credential	Relative Value	Average Sample Earnings	
		Women	Men
High School Graduation	1.0	.75[a]	.73[a]
Diploma and Certificate Programs Number of Years	0.4	.32	.32
University			
Number of Years	1.0	.40	1.60
Graduation	1.3	1.3	.46
Post-Secondary Training			
Number of Years	0.8	.08	.40
Graduation	2.0	.04	.34
Each Alberta Public Service Course	0.20	.18	.36
Each Other Job Related Course	0.15	.09	.18
		1.99	4.39

[a] These values were computed by multiplying the weights in Column 1 of the Table by the sample mean or percentage from Table 5.

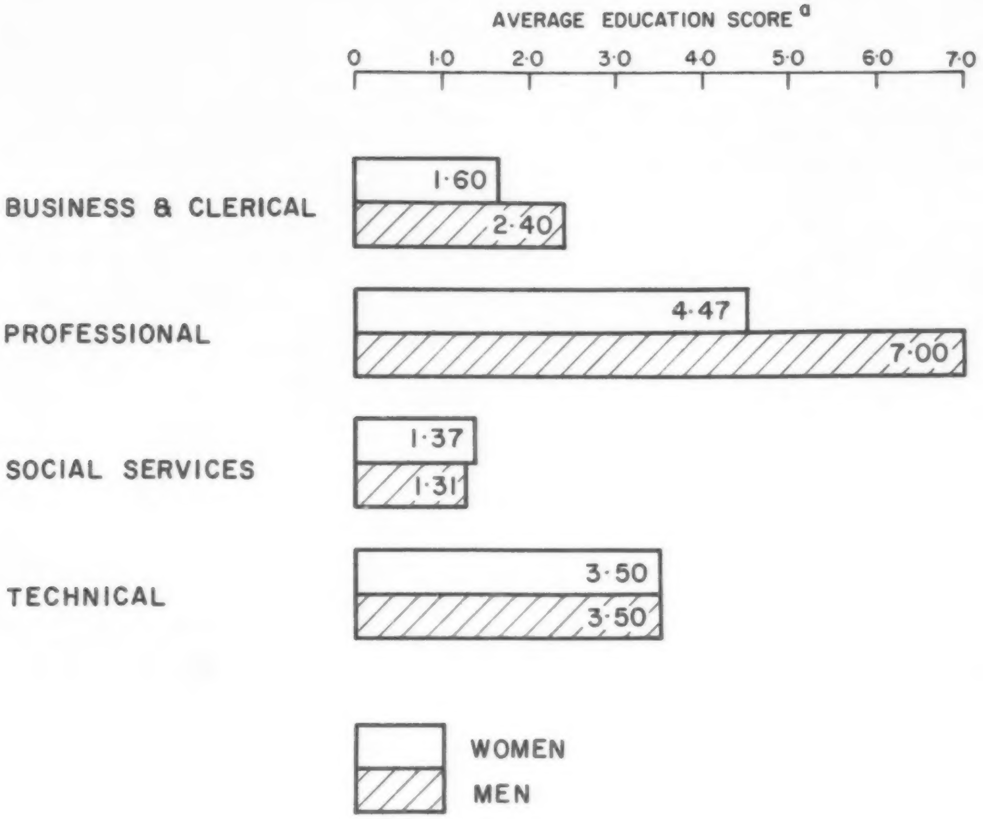
A year of training in a diploma or certificate program yields only .4 points. Each year of University and post-graduate training earns about 1.0 points. University graduation and graduation from a post-secondary program adds 1.3 and 2.0 points respectively.[3]

A score was computed for each employee, based on these weights, which summarizes the total value of his or her educational background. FIGURE 6 presents the average score of men and women within each occupational group.

A statistical analysis of the score, which controlled for age and occupational group, found that only the female/male differences in the Business and Clerical and in the Professional group were significant. Looking at FIGURE 6, it can be seen that differences among Social Service employees actually favour women, although they are small. There are no differences between females and males in the Technical group. Business and Clerical men, however, score somewhat higher than women. In the Professional category, the differences favouring men are quite substantial.[4, 5]

EMPLOYMENT HISTORY

The questionnaire asked respondents how many years of full-time and part-time experience they had accumulated, both with the Alberta Public Service and with other employers (QUESTIONS P, W



COMPOSITE EDUCATION SCORES OF WOMEN AND MEN

FIGURE 6

[a] This graph presents average composite education scores which reflect the relative value of various types of training to advancement in the Alberta Public Service. See the text and footnotes 2,3 and 4, for a fuller explanation

and S, Parts a through c). Information was also obtained concerning any interruptions in the respondents' work history (QUESTION T). In order to determine the diversity of employees' work experience, respondents were asked to indicate the number of employers for whom they had worked as well as the number of different positions they had held with the Alberta Public Service (QUESTIONS R and S(d)).

The data show that men have had a more extensive and varied work history than women. Women average 5.8 years experience with the Alberta Public Service, compared to 8.9 years for men, a ratio of 65%. The pattern for years of experience with other employers is similar: 4.1 years for women vs. 7.5 years for men, a ratio of 55%.

As well, men have held a greater number of different positions within the Alberta Public Service (2.2 vs. 2.0) and have also worked for a greater number of employers other than the Alberta Public Service (3.1 vs. 2.5).

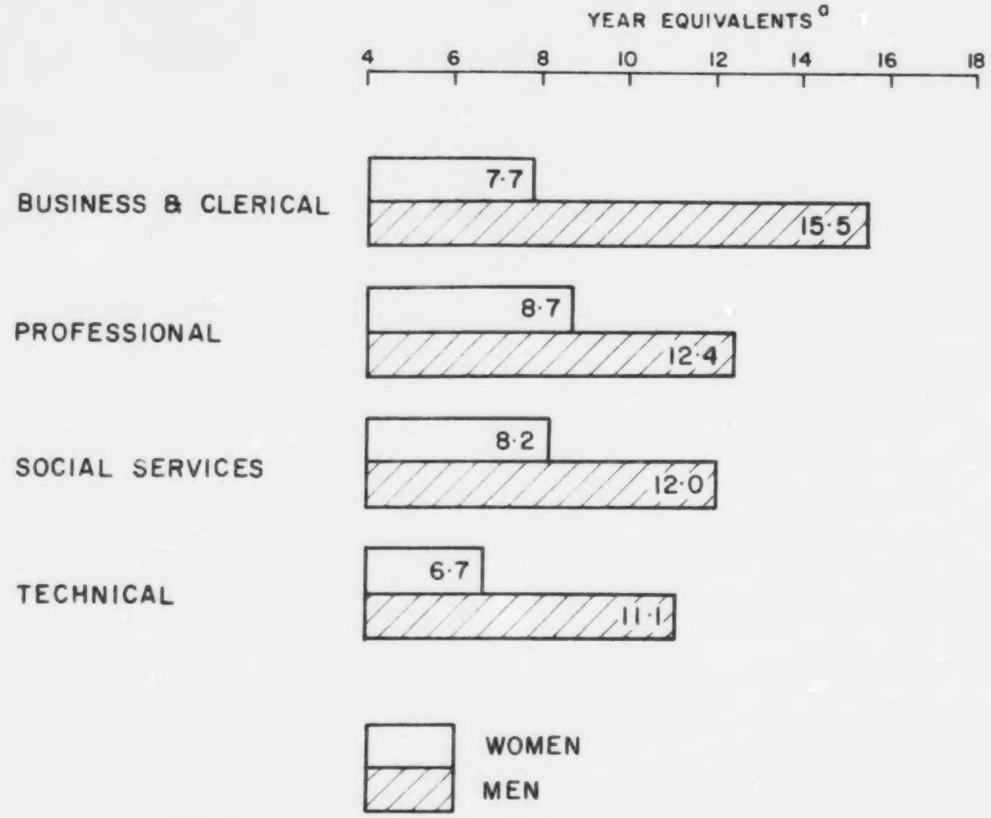
Although women as a group are younger than men, age does not totally explain the difference. The average age of women in the Public Service is 31 years vs. 34 years for men, a ratio of 91%. The discrepancy between the age of women and their length of experience is explained by a greater incidence of interruptions in their careers. 60% of women but only 44% of the men have had interruptions in their careers. Further, 37% of women expect future interruptions or retirement, **while** only 15% of the men do so.

A statistical analysis of the relationship of experience to salary revealed that experience with other employers only carried half the benefits to salary as experience with the Alberta Public Service. Part-time work carried no benefit at all. Thus, in assessing the total value of experience, employees were given one point for each year with the Alberta Public Service and half a point for each full-time year working for other employers.[6]

FIGURE 7 presents the scores on this composite variable for men and women in the various occupational groups. Men consistently score higher than women by a substantial margin. The difference is especially striking in the Business and Clerical group. A statistical analysis revealed that women had fewer years of experience than men, even when age and occupational category were taken into account.[7]

JOB PERFORMANCE

An employee's advancement within any job or career is obviously heavily dependent on the quality of his or her performance. This is a very difficult area to measure, since it is is wholly limited to what respondents report about themselves.



YEARS OF EXPERIENCE OF WOMEN AND MEN

FIGURE 7

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[a] This is a weighted composite score in which years of experience working for other employers is discounted by half and no credit is given for part-time work (see the text plus footnotes 5 and 6 for a fuller explanation).

Nevertheless, prior research suggested that useful information could be collected from respondents concerning their own performance.[8]

A number of scales have been developed to rate employees, and there is evidence that employees' rating of their own performance does agree with supervisors' ratings. A scale was constructed for the present study, drawing on existing scales, and adding other items to increase its scope and relevance to positions with the Alberta Public Service.

The resulting question consisted of 14 general items, plus three more for managers, which asked respondents to rate their own performance in various areas, including such items as technical competence, creativity, motivation, productivity and leadership etc. (QUESTION QQ). Employees were also asked what rating they had received from their supervisors at the last performance appraisal and what rating they thought they should have received. (QUESTION RR).

The results from the individual item ratings (QUESTION QQ) show that men rated themselves slightly higher than did women. However, ratings on the various items did not relate well to one another, nor did they relate highly to the employees' overall rating of their performance or the ratings given by their supervisors. Furthermore, an overall score derived by averaging the individual item ratings did not relate consistently to salary. A similar pattern emerged with the overall self-rating - this measure did not relate well to the other measures, nor did it show a consistent relationship to salary. The supervisor's rating, however, did relate to salary.[9] Therefore, it alone was retained in the subsequent analyses. On this measure, men and women show no difference. Both report average ratings of 3.1.

Returning to the self ratings, it is interesting to note the pattern that emerged. Men rated themselves particularly well in the following areas: technical expertise, keeping up with new developments, enjoying challenge, responsibility, being highly motivated, being decisive, being logical and analytical, and being able to explain things clearly. Women gave themselves high ratings on productivity, motivation and energy. These ratings are congruent with the stereotypes that many people hold about men and women (see Discussion section of this report). It is likely that the ratings reflect these stereotypes rather than true differences (Farley, 1979, p. 60-63).

The supervisor's rating however, was found to relate to salary. Analysis of the rating itself, controlling for background differences, confirms that there are no differences between men and women.[10]

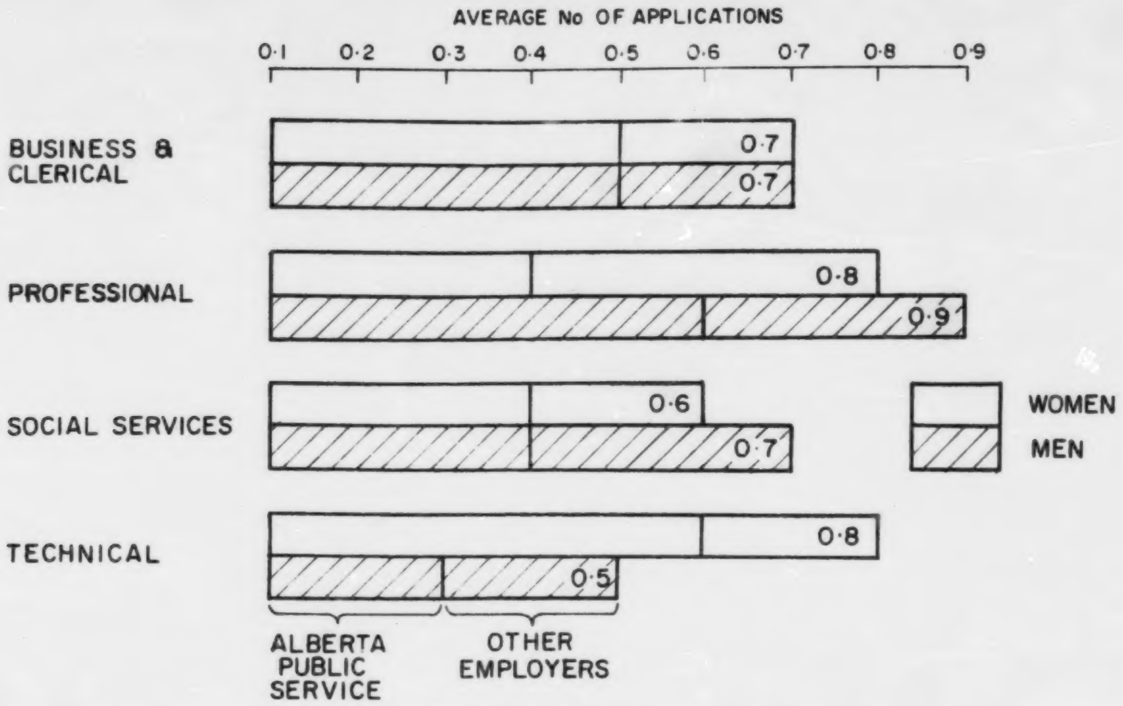
APPLICATIONS

Information was collected on how active employees had been in seeking promotion. QUESTION LL asked employees whether they had plans to apply for a particular position. 30% of the men, but only 20% of the women, responded "Yes". More men than women (35% vs. 24%) also reported that they "usually" watch the job postings within the Government (QUESTION MM).

A very important aspect of the career development process is how active respondents have been in applying for other positions. Respondents were asked how many applications they had made for various positions, both within the Alberta Public Service and with previous employers.

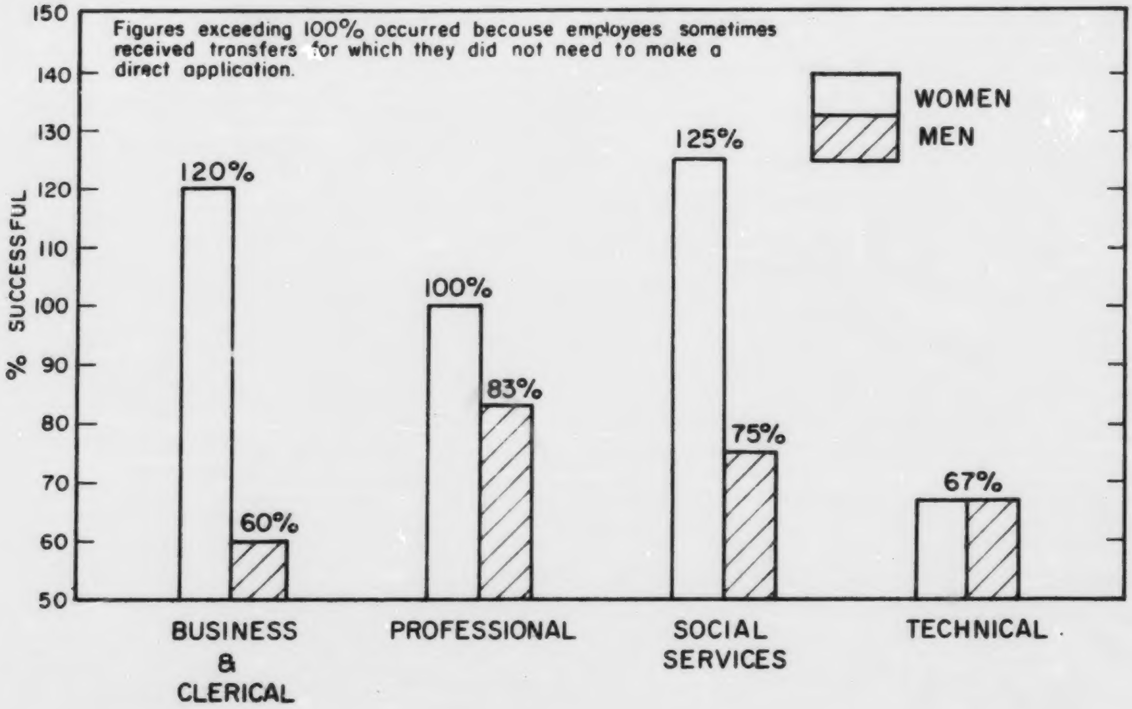
The questionnaire asked employees to indicate separately the number of applications made which would have represented lateral transfers and the number which would have represented promotions (QUESTION NN). Respondents were also asked how many of each of these types of applications were successful.

As can be seen in FIGURE 8, there were no consistent differences between men and women in the number of applications for horizontal transfer, either within the Alberta Public Service or with other employers. Professional and Social Service men had a somewhat higher rate than corresponding women employees, but the rate of applications for lateral transfer by Technical



APPLICATIONS FOR LATERAL TRANSFER BY WOMEN AND MEN

FIGURE 8


Figures exceeding 100% occurred because employees sometimes received transfers for which they did not need to make a direct application.

SUCCESS RATE OF APPLICATIONS FOR LATERAL TRANSFER
(Alberta Public Service only)
FIGURE 9

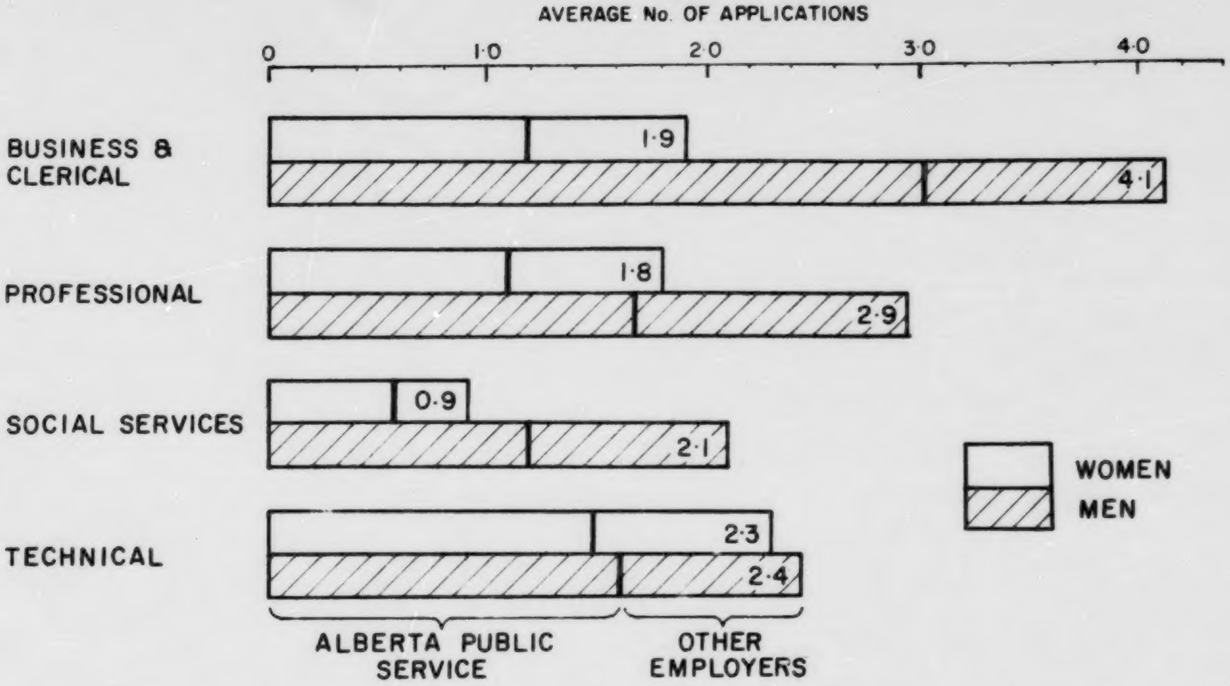
women exceeded those for men.

Overall, women were more successful than men in obtaining lateral transfers within the Public Service. The overall success rate was 80% for men and 100% for women. Except for Technical employees, where men and women had equally low rates of success, women were more successful than men in each group (see FIGURE 9).[11]

A somewhat different picture emerges for applications to higher level positions (see FIGURE 10). Within the Alberta Public Service men apply for promotion at a ratio of 3 to 2 over women. This rate varies by occupational category. It is largest, almost 3 to 1, within the Business and Clerical category. It declines to 2 to 1 within the Social Service category, and further declines to 3 to 2 within the Professional group. In the Technical category, however, the ratio for men and women is nearly equal.

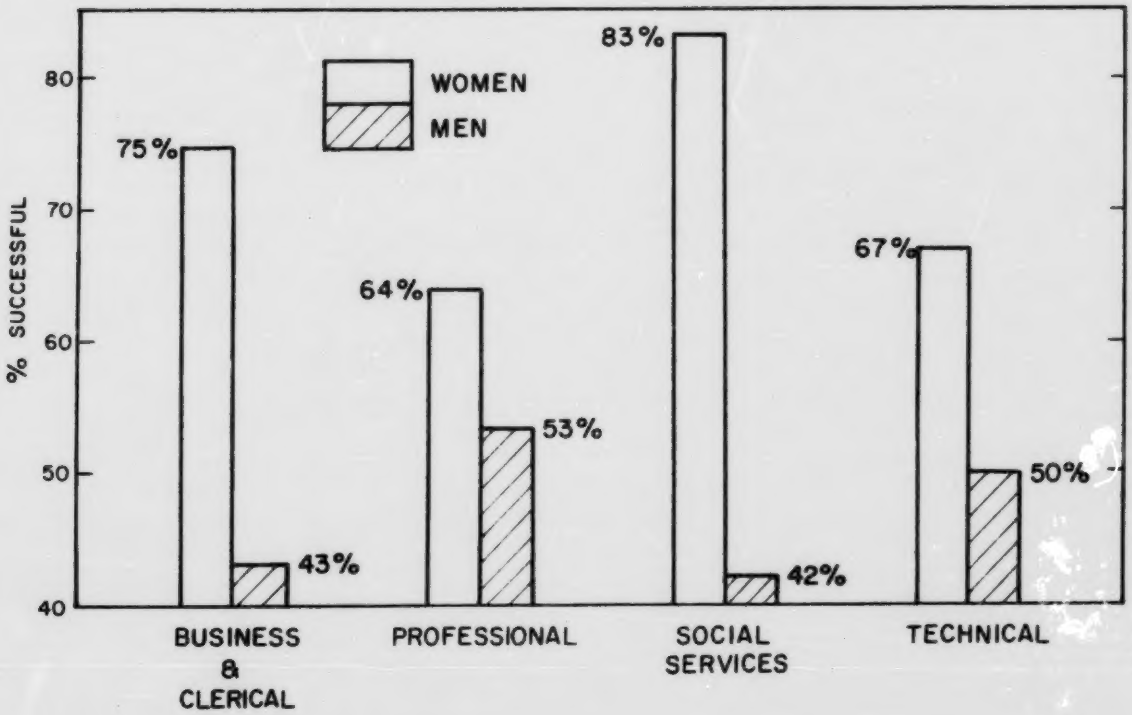
The two scores for vertical applications - within the Alberta Public Service and with other employers - were summed to derive a composite score for each employee. Analysis of the composite, controlling for background characteristics, confirm the significance of the male-female difference noted above.[12]

However, women are very successful when they do apply.



APPLICATIONS FOR PROMOTIONS

FIGURE 10



SUCCESS RATES OF APPLICATIONS FOR PROMOTION

FIGURE 11

Overall, 75% of women's applications for promotion are successful, whereas this is only true for 47% of the applications made by men (see FIGURE 11). In absolute terms, the promotion rate for men and women is equal; men apply more often, but women are more often successful when they do apply. This is intriguing because the next section will show that women have not progressed as far through the occupational hierarchy. This seeming incongruity may mean one of two things: that men enter the Alberta Public Service at a higher level and/or that men are more often promoted through a number of job levels in one promotion.

FAMILY RESPONSIBILITIES

The four variables already outlined - Education, Experience, Performance and Applications - might be expected to influence an employee's career directly. However, there are other factors which might have indirect effects. Among these are dispositional variables such as Career Commitment, indices of competing pressures such as Family Responsibilities, and measures of the extent to which the organization has encouraged employees to obtain more education or to apply for promotion. Each of these will now be considered in turn, beginning with Family Responsibilities.

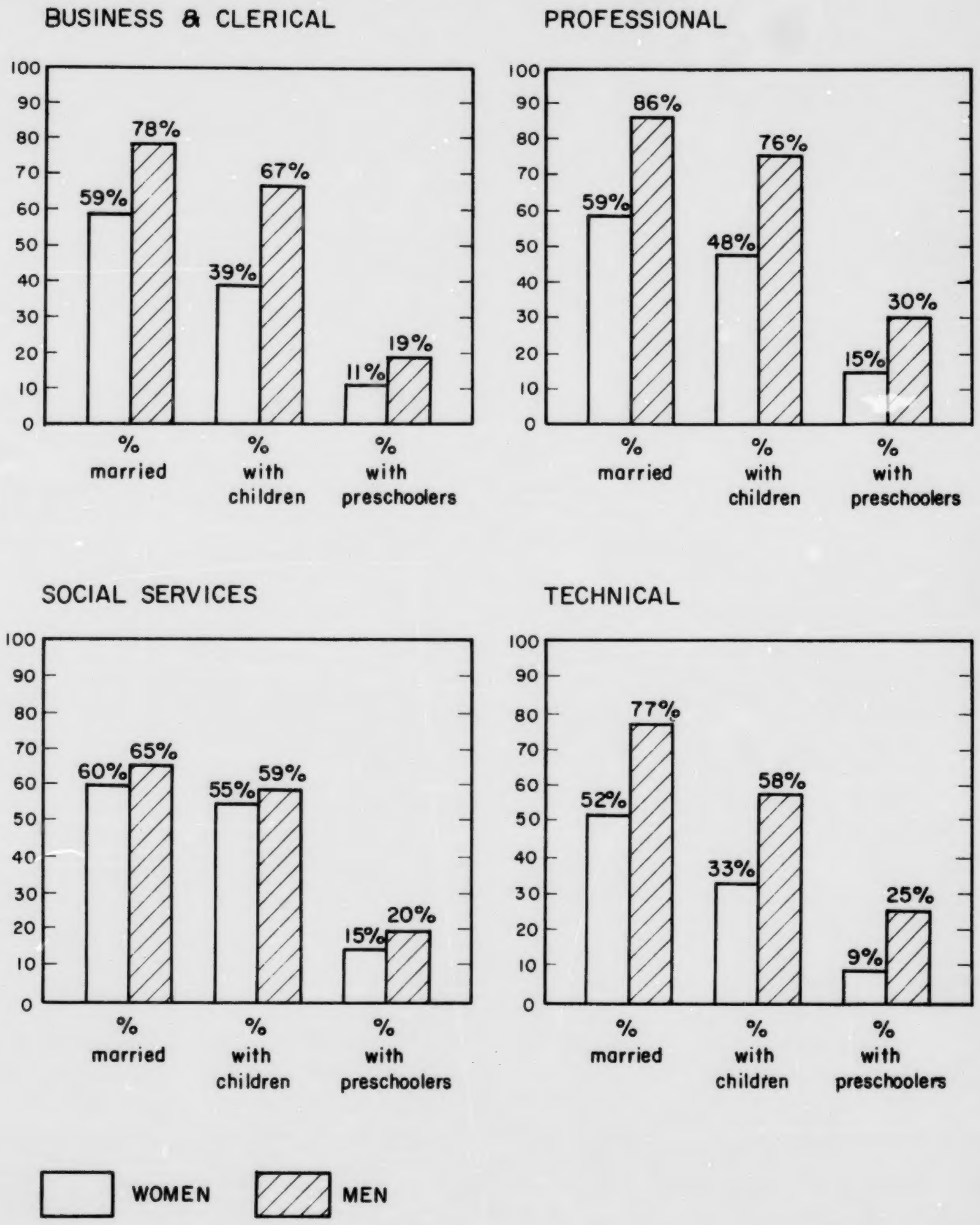
Given the younger age of female employees, which has been described in a previous section, it is not surprising to find that fewer women than men are married or have children (see

FIGURE 12). The percentage of women who are married stands at about 60% in each occupational group. However, there is a difference by group in the number of women who have children. Among female employees in the Technical category, only 33% are parents.

In the Professional category, however, the percentage of women who have children is considerably higher (48%). This contrast is interesting because the age distributions of the two groups are similar, with both groups peaking at ages 25-29. Thus it appears that Professional women are more likely to remain in the work force when they begin raising a family, or, to return to the work force quickly if they do drop out for a time.

Business and Clerical women are intermediate to these two groups in the percentage with children (38%). The highest rate is held by Social Service women, 55% of whom have children. These women present an interesting contrast to the Business and Clerical group with whom they share a similar age distribution - both groups peaking early at ages 20-24. It is very likely that Social Service women remain in the work force concurrent to raising their families because of economic need.

The majority of men in all occupational groups are married



FAMILY STATUS OF FEMALE AND MALE EMPLOYEES

FIGURE 12

and have children. The highest percentage of married men with children occurs in the Professional category, probably because these men are older and earn higher salaries.

Roughly equal numbers of Business and Clerical and Technical men are married, but fewer Technical employees have children. This may reflect the fact that Technical employees have attended school for a longer period of time before entering the work force, and have, therefore, postponed beginning a family. Social Service men are the least likely to be married, but almost all of the married men in the category have children.

Although fewer women than men employees are married and have children, women spend more time than men on household tasks. Respondents were asked to indicate on the questionnaire how many hours per day they typically spend on essential household tasks, including cooking, cleaning, gardening, maintaining the car and caring for children. Respondents were also asked how much additional time they spend each week in leisure activities with children (QUESTION U, Parts a and b).

The data show that women spent an average of 22.5 hours per week on household tasks as opposed to 17.4 hours spent by men. Men spent more time than women engaged in leisure activities with children - 2.9 hours vs. 1.9 hours per week for women. These differences are not very large, but they do indicate that women spend more time, overall, on household tasks.[13]

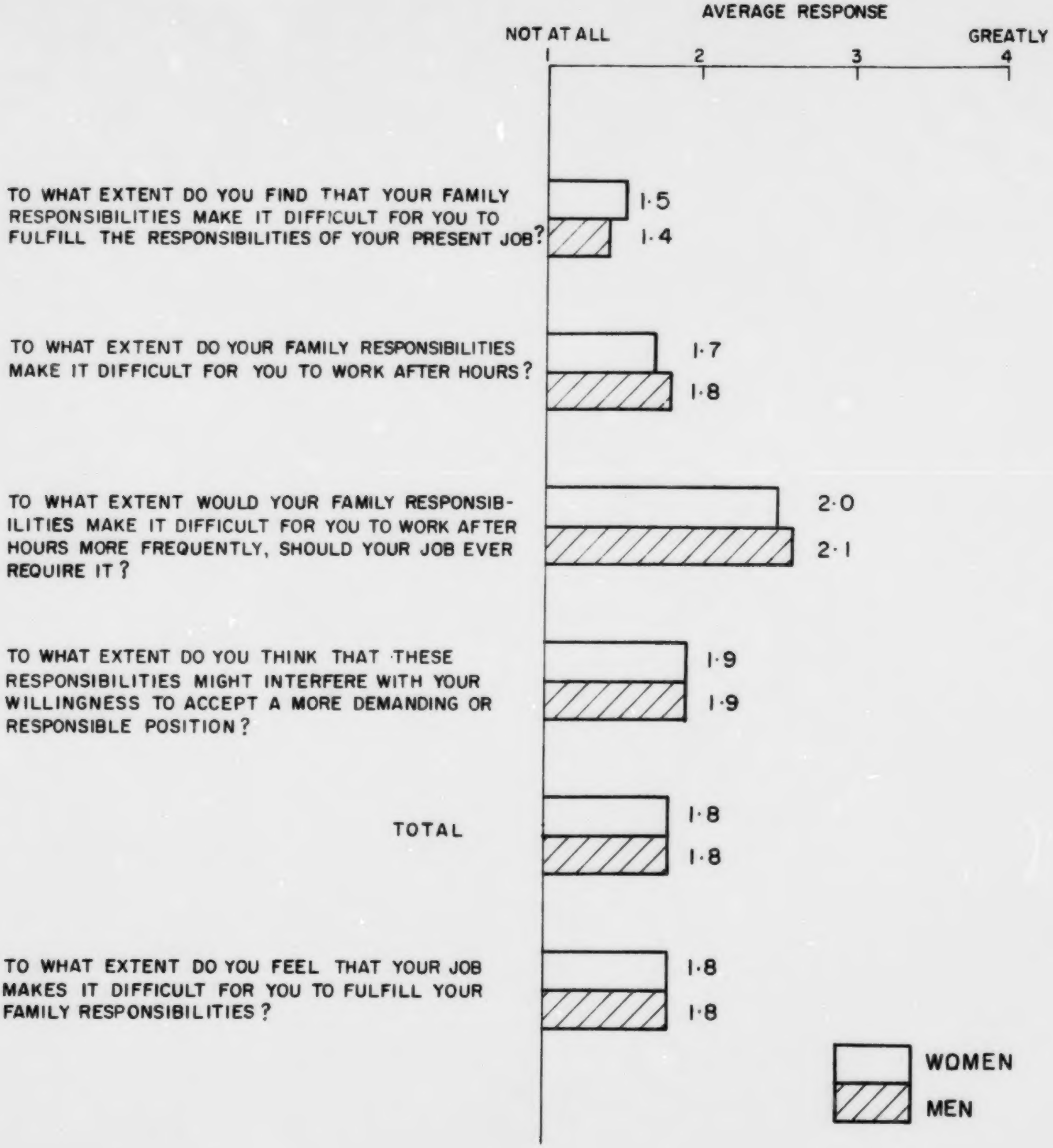
Very few individuals employ paid household help (4%) or child care services (25%) (QUESTIONS V and W.)

Given this pattern of family responsibilities, it might be expected that women would experience more interferences from family with their job. The questionnaire included a series of questions on this topic (QUESTIONS X THROUGH CC), each one tapping a different aspect of potential family interference. For example, the first question in this series asked:

> "To what extent do you find that your family responsibilities make it difficult for you to fulfill the responsibilities of your present job?"

Respondents could select one of four possible response categories, ranging from "not at all" to "greatly". The average response to this question by men and women is shown in FIGURE 13, along with the responses to the other questions in this series. Contrary to what might be expected, women and men had similar scores on these items. However, a number of factors must be kept in mind when interpreting these data.

First of all, more of the men were married and had children. Second, men tended to occupy more demanding positions than women. In response to QUESTION Z, 30% of the men and 54% of the women said that they "rarely or never" had to work outside of normal working hours. The number responding "once a month"



REPORTED INTERFERENCE FROM FAMILY RESPONSIBILITIES FOR WOMEN AND MEN

FIGURE 13

or "2 to 3 times a month" were very similar for men and women, 9% and 16% respectively. However, more men than women reported working overtime "once a week" (15% vs. 7%), or "more than once a week" (28% vs. 13%).

A scale respresenting the total amount of Interference was constructed by summing the responses to the four questions listed in FIGURE 13. A statistical analysis of the total scores shows that men actually experience more interference than women who are comparable in such background characteristics as age and occupational category.[14]

It should be noted that these data reflect perceived interference, not interference as objectively measured. It is possible that men are less accepting of interference from family duties and, thus, report greater conflict. Nevertheless, one cannot fail to be impressed by these results since they run counter to the general stereotypes about women and men workers and the amount of interference they experience from their families.

QUESTION Y, which was related to this series, asked:

> "To what extent do you feel that your job makes it difficult for you to fulfill your family responsibilities?"

Responses to this question were similar to responses assessing interference by the family on the job. The response of employees to both types of items averaged near "very little". Generally speaking, employees experience a small amount of interference in both directions and seem able to integrate their home and job roles.

However, men achieve this while assuming more demanding job responsibilities. This reflects society's practice of assigning the bulk of home tasks to women, although it must be emphasized that this assignment is no longer as rigid as it once was.

The results from Time spent on household tasks are more striking because of the similarities between men and women than because of differences. One might wish to question these data since they are based on self report. Some diary studies of the actual time spent by men and women show larger differences (Meisner, et al, 1975). It is thus possible that the men in the present study overestimated the time that they spent. Nevertheless, these data demonstrate to some extent the psychological nature of family pressures. It must be kept in mind that fewer than half of the women had children and were thus free from many obligatory duties and responsibilities. The data also show that better educated employees and those with better performance appraisals spent less time on these tasks, regardless of sex.

Time spent does increase in the middle years for both men and women, reflecting the fact that much of the pressure from family life is objective and cannot be ignored. Nevertheless, individuals, both men and women, do have some control over this aspect of their lives. The results show that individuals, both male and female, who hold demanding positions continue to have family responsibilities, but fulfill these in addition to the requirements of the job. Women have, or perceive themselves to have, more such responsibilities. Nevertheless, there appears to be a certain element of choice in the level of responsibility that individuals assume. At least this is true for women and men who choose to work.

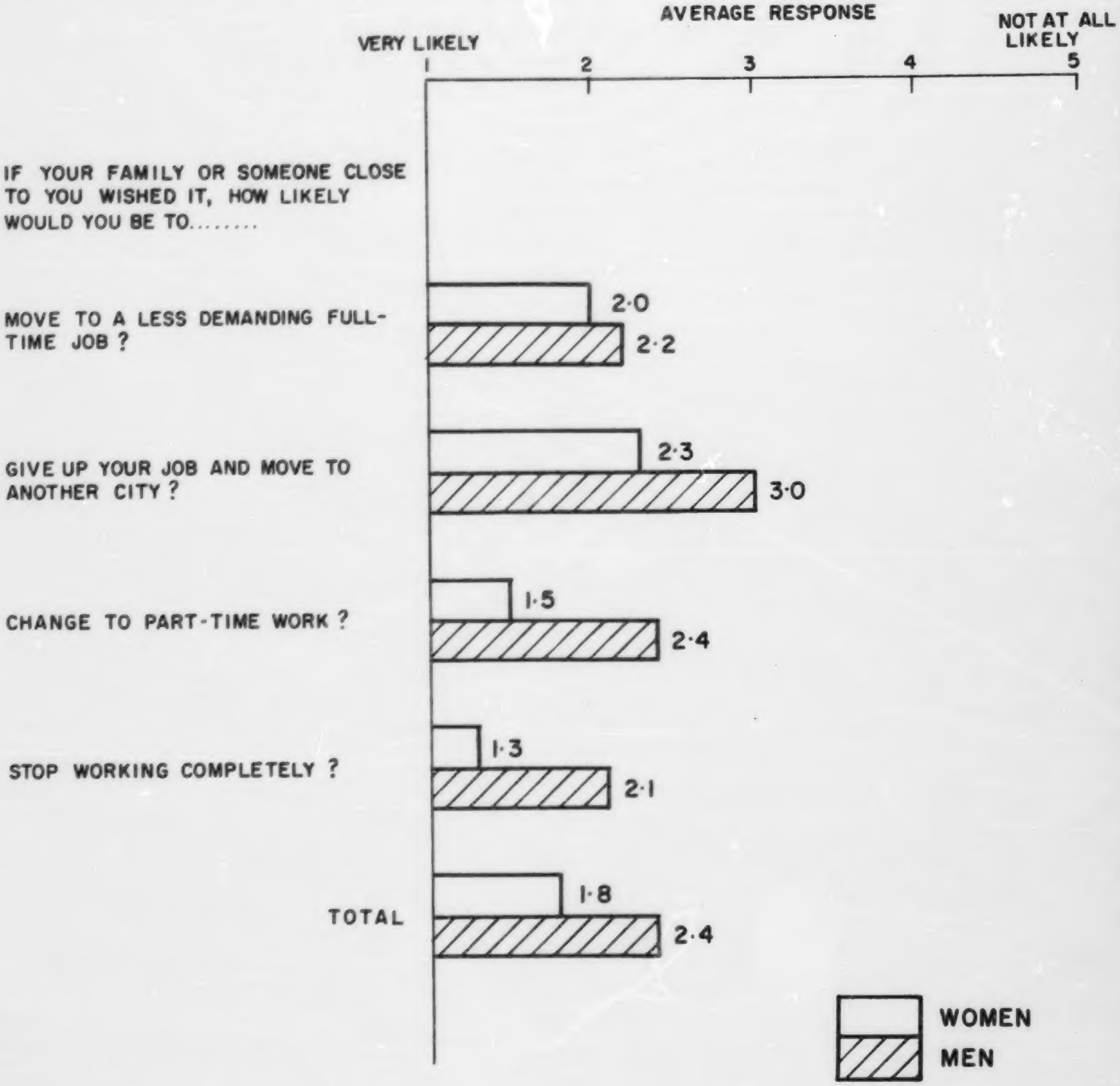
CAREER COMMITMENT

The questionnaire included a number of questions on the extent to which respondents were highly committed to working and advancing within their profession. Several questions were used to elicit information on the subjective importance of working. QUESTION FF asked respondents to rate the importance of working on a 5 point scale. Women scored an average of 4.3 on the scale and men averaged 4.6. QUESTION GG assessed the extent to which respondents would be willing to modify their current working arrangements in response to family pressures. Respondents were asked to what extent they would be willing to change to a less demanding job, to move to another city, to change to part-time work, or to stop working completely. Substantial differences between women and men are noted on this question, with women consistently scoring lower than men (see FIGURE 14). A total score was computed for each individual by summing the responses to the four parts of this question. As can be seen in FIGURE 14, women also score lower than men on this composite variable.[15]

However, further analyses of the data reveal that some of the difference is due to other factors. In general, Business and Clerical employees, younger employees, and less experienced employees score lower. Nevertheless, some effects due to sex remain, indicating that women are generally less committed to their jobs than men.[16]

It might be supposed that the lesser job commitment of women is due to their having less financial responsibility for the family. Responses to QUESTION EE show that more men than women were the sole support of their families (52% vs. 34%),and that more men than women provided the major support for themselves and their families (33% vs. 10%). However, women's salaries were important. 31% of the women reported that they provided an equal share of expenses. If the number of respondents who reported that they contribute half or more to their family income is added, the respective figures for men and women are 98% and 77%.

Another group of women reported that they contributed a minor, but essential share to their families' support (16%). Only 7% were working for "extras". Although women indicated that they carry less financial responsibility than men, the vast majority (93%)



IMPORTANCE OF WORKING TO WOMEN AND MEN

FIGURE 14

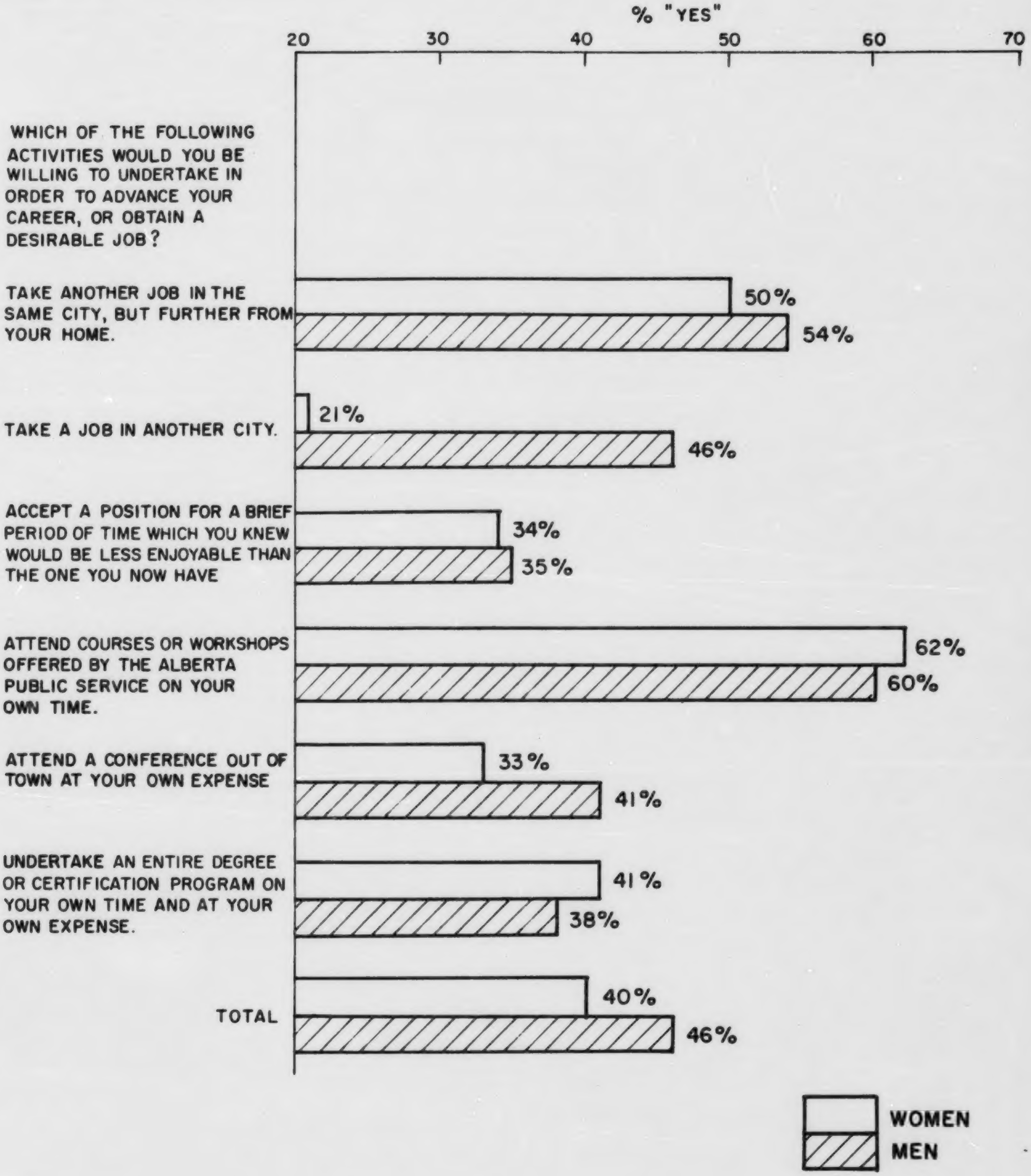
report that their salary is essential to the family.

Response to this item did not relate highly to items assessing the importance of a career.[17] This suggests that financial need is only one of the factors leading people to work. Both men and women work to meet other needs as well, such as the need to be with others or the need to develop skills and abilities.

Another aspect of Commitment is the willingness of employees to work actively towards advancement in their careers. QUESTION PP asked respondents whether they would be willing to engage in various activities which might lead to advancement. Six activities were listed and FIGURE 15 shows the percentage of women and men responding "Yes" to each one.[18]

As FIGURE 15 shows, men scored higher than women. However, the overall difference is not as great as might be expected. There were substantial numbers of women who would be willing to undertake each type of activity and substantial numbers of men who would not. There are even two items on which women's scores exceed those of men - both items related to undertaking additional training. However, there is one item in which the difference between men and women was substantial - whether the respondent would be willing to take a job in another city. Only 26% of the women said that they would be willing to do so.

Some of the differences between men and women are due to other factors. A notable characteristic of these data



ACTIVITY SCORES OF WOMEN AND MEN

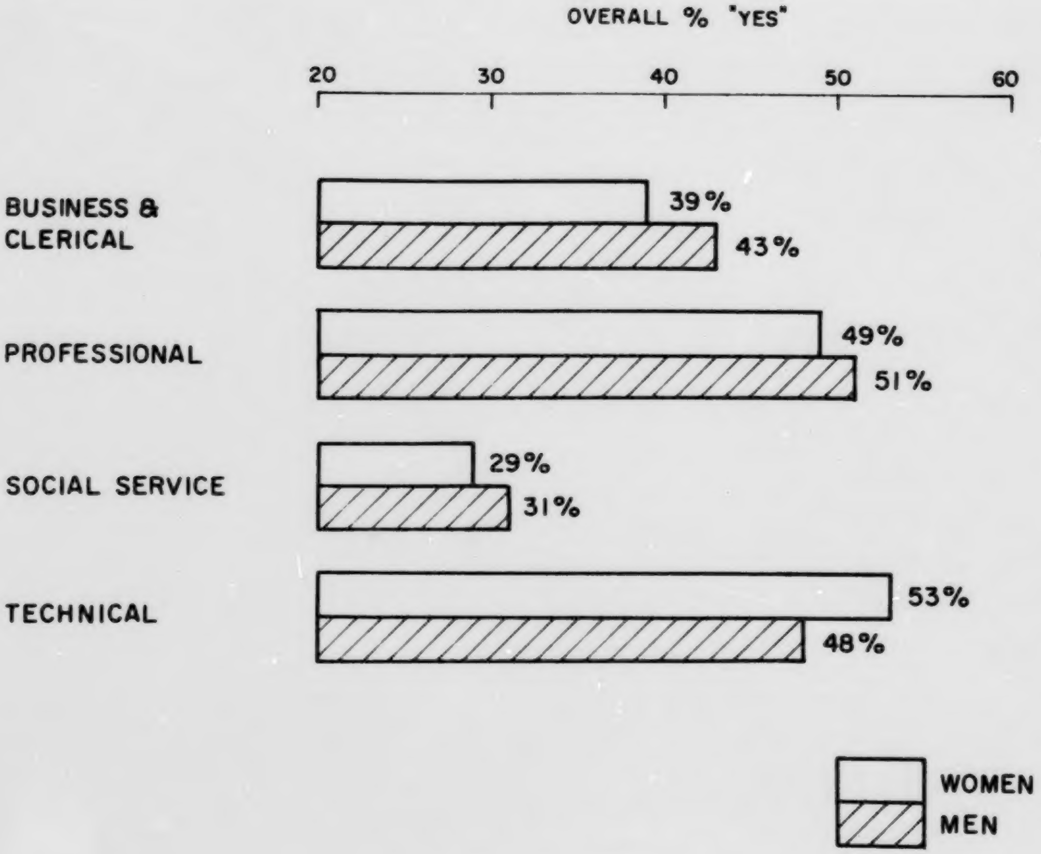
FIGURE 15

are the large differences among occupational groups. These differences are so striking that the discrepancies between women and men seem small by comparison (FIGURE 16). In the highest scoring group, Technical, women actually outscore men by a small margin. Close behind this group are the Professional employees, where men again have a slightly higher score than women. Considerably below these two groups are the Business and Clerical employees and below them, Social Services.

The spread between the highest and lowest scoring occupational group within a sex category is 24% for women and 20% for men. The overall difference of 6 percentage points between men and women as a whole is small by comparison, and is largely due to the fact that women are concentrated in Business and Clerical positions, where men do score high.

When differences in background characteristics are taken into account, the only remaining male advantage is in the Business and Clerical group. In all other groups, women are as willing as men to engage in activities which might develop their careers.[19]

A third measure related to Commitment is "Ambition" (QUESTION II). Ambition was assessed by asking respondents to indicate the job level they hoped to occupy at the end of their working life. Because of the occupational diversity of the sample, this question had to be very general and respon-



ACTIVITY SCORES BY AGE, OCCUPATIONAL GROUP AND SEX

FIGURE 16

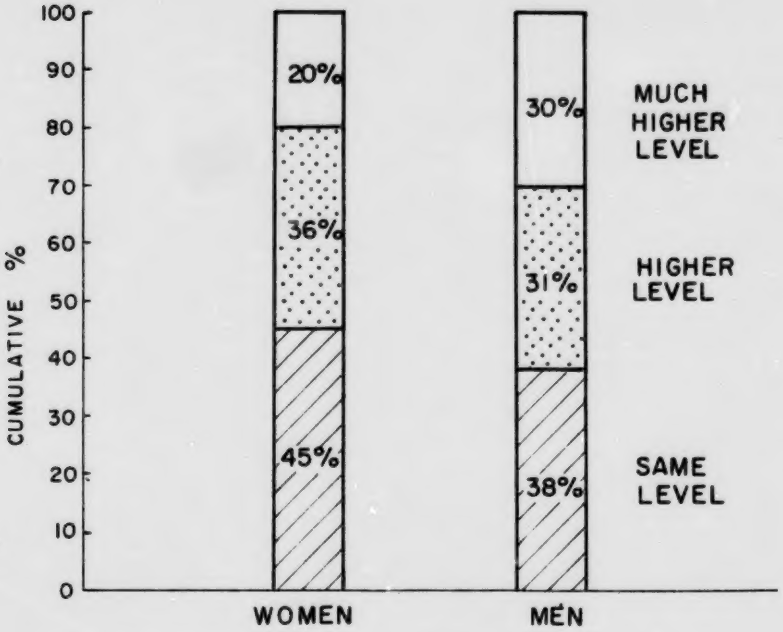
dents could only be allowed to choose from among a few response categories. Respondents received a score of "1" if they reported that they hoped to continue working in a job similar to the one they currently held or if they hoped to work in a different job at a similar level. Respondents scored "2" if they hoped to occupy a "somewhat" higher level position and "3" if they hoped for a "considerably" higher level position. The results appear in FIGURES 17 and 18.

Data in FIGURE 17 indicate that women were generally less ambitious than men. Fewer women aspired to higher level positions and when they did so, their level of aspiration was lower.

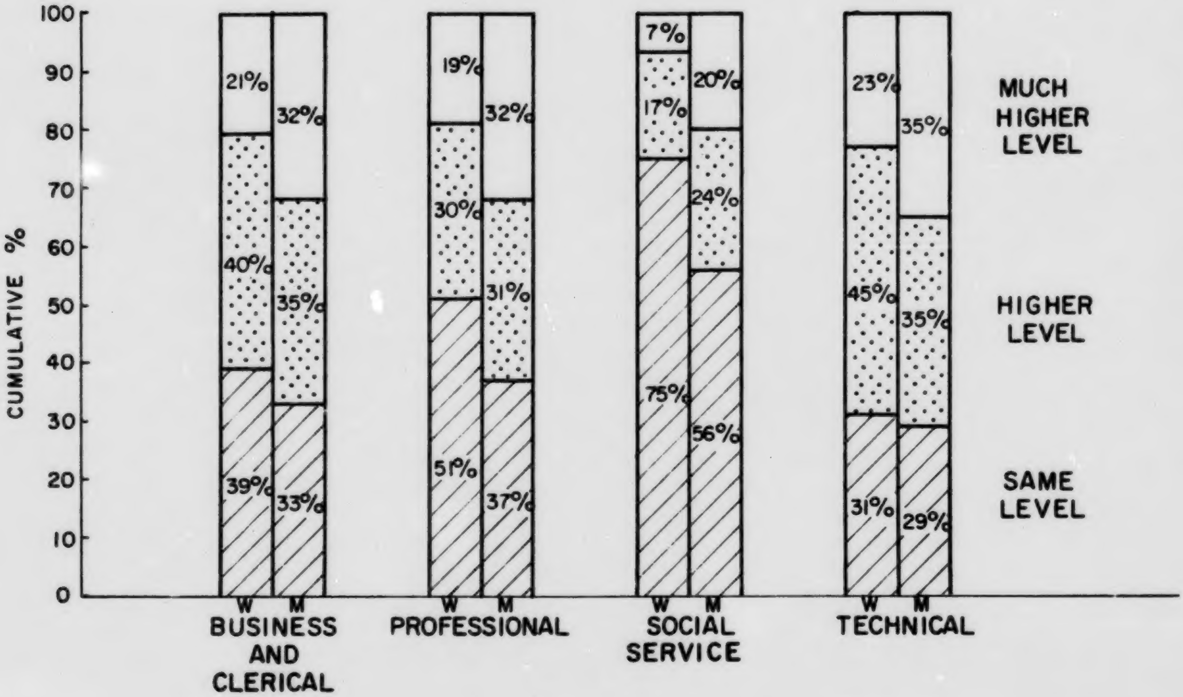
However, as with the Activity scores, this difference is overshadowed by differences among the four occupational groups. FIGURE 18 shows a spread of 27% among occupational groups in the percentage of men who expect to remain at the same level. The discrepancy among occupational groups for women is 44%.

Among both women and men, Social Service employees score low, followed by Professional, then by Business and Clerical, and finally by Technical employees, who score the highest.

When occupational category and other differences are taken into account, the only remaining sex difference is the



AMBITION OF WOMEN AND MEN
FIGURE 17



AMBITION OF WOMEN AND MEN
BY OCCUPATIONAL CATEGORY
FIGURE 18

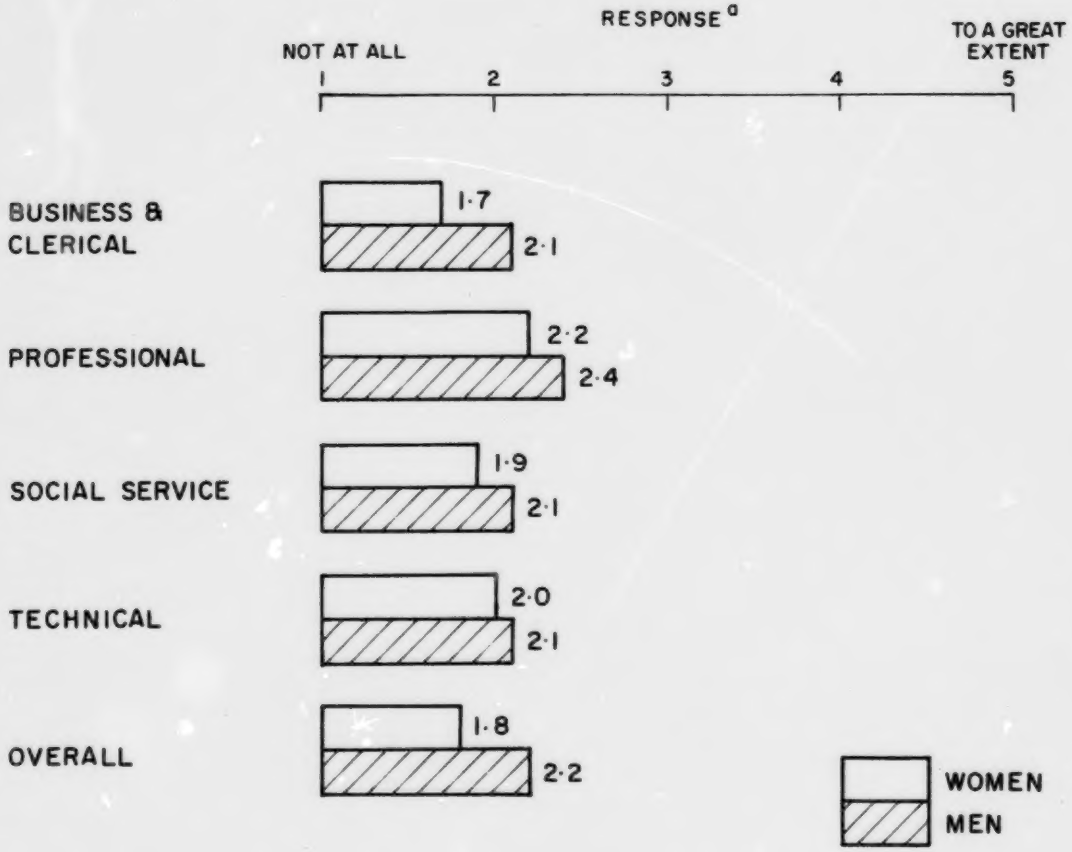
fact that young men score higher than young women. For employees in the middle or senior age groups, however, men and women with comparable backgrounds are similar.[20]

Looking at all three measures of Commitment - Importance of a Career, Activities and Ambition - women are shown to score consistently lower than men. However, statistical analysis shows that this is largely a function of differences in background characteristics, most notably occupational group and level of education. When these are taken into account, few differences remain. Nevertheless, those which do exist, favour men.

MENTORING

A number of questions focused on the extent to which employees had been encouraged to obtain further training and to seek advancement. QUESTION O asked to what extent respondents had been encouraged by the Alberta Public Service to undertake further training and QUESTION S(e) requested the same information about other employers. QUESTIONS L, M and N(d) asked about the availability of educational leave and financial support for further education.

The results show that men receive more of each type of encouragement than do women (see FIGURE 19). On a scale of 1 to 5, men on average, rated the degree of encouragement they



ENCOURAGEMENT RECEIVED BY WOMEN AND MEN TO OBTAIN FURTHER EDUCATION

FIGURE 19

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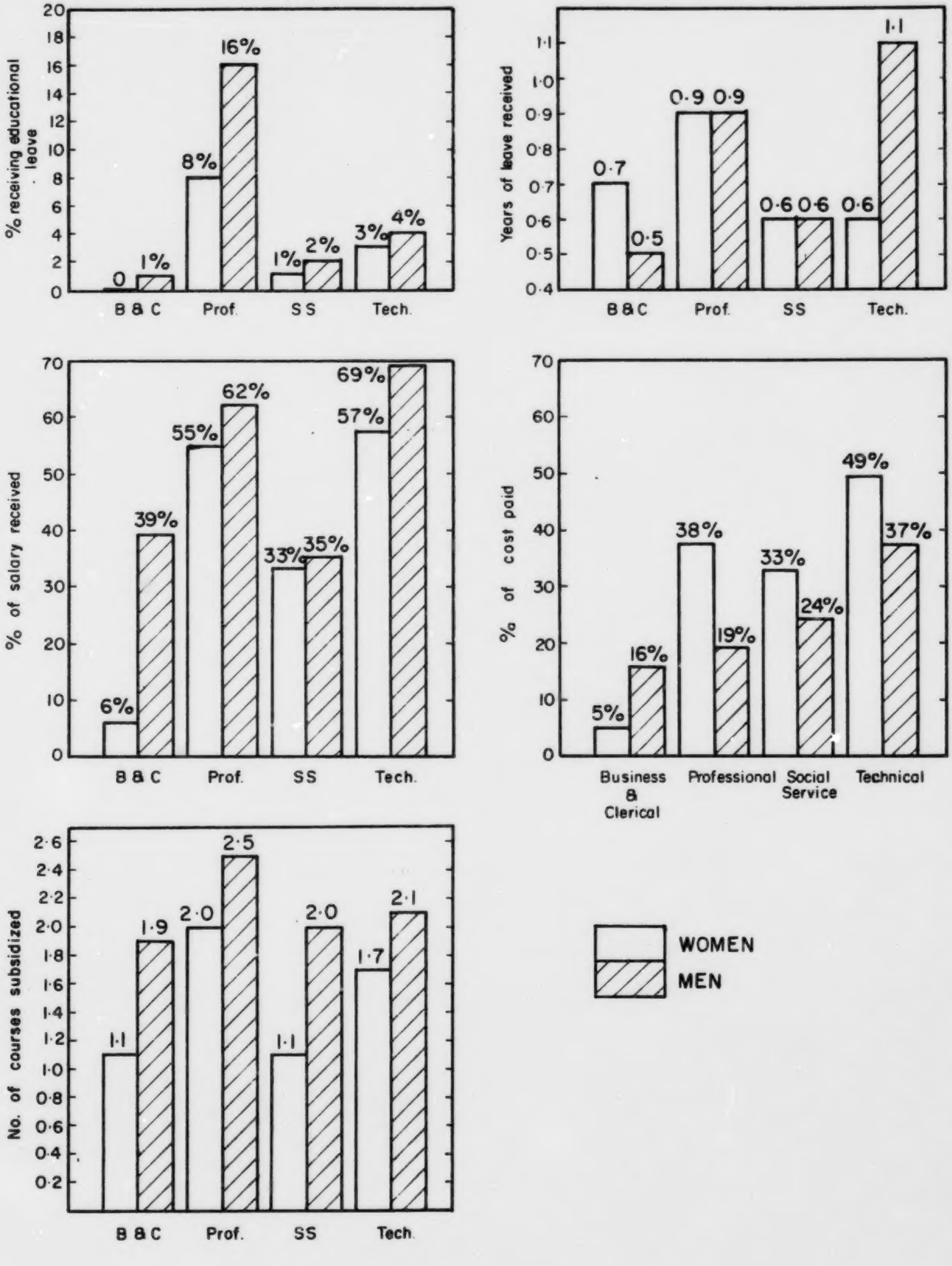
[a] The percentage given represents the average rating of encouragement received from both past and present employers.

had received at 2.3, while women rated it as 1.9. A similar discrepancy was reported in the degree of encouragement received from other employers; average response ratings were 2.1 for men and 1.7 for women.

Within the Alberta Public Service, educational leaves are available to only a minority of employees. However, these are far more likely to be available to men than to women. Only 2% of the women but 8% of the men had received educational leave. This represents about 245 women and 590 men within the population surveyed.

Men also received slightly longer leaves than women, an average of .9 years vs. .8 years respectively. There is also a substantial discrepancy in the percentage of salary that men and women received while they were on leave - an average of 58% vs. 38%, respectively. This difference is partially offset by the fact that a greater percentage of women's tuition costs were paid than was true for men - 28% vs. 21%. However, men more often were reimbursed for courses taken on their own time - an average of reimbursement for 2.4 vs. 1.3 courses.

These differences vary considerably by occupational group (see FIGURE 20). Very few Social Service employees received educational leave, and there is little difference in the encouragement given to men and women to obtain further



SUPPORT RECEIVED BY WOMEN AND MEN
TO OBTAIN FURTHER EDUCATION

FIGURE 20

education within the Social Services category. This is simply a group in which neither women nor men receive much impetus to develop themselves further.

A similar pattern exists with Business and Clerical employees. There, too, educational leaves are rarely given to either women or men, although men receive more encouragement to obtain further training.

Educational leave is a more frequent occurrence among the Technical and Professional groups. The pattern of differences favouring men varies between the two groups. Within the Technical group it shows up as men receiving longer leaves (1.1 years vs. .6 years). Within the Professional group, the difference is in the percentage of employees receiving leave; 16% for men and 8% for women. The remaining indicators are nearly equal, although men are almost always favoured to some degree compared to women.

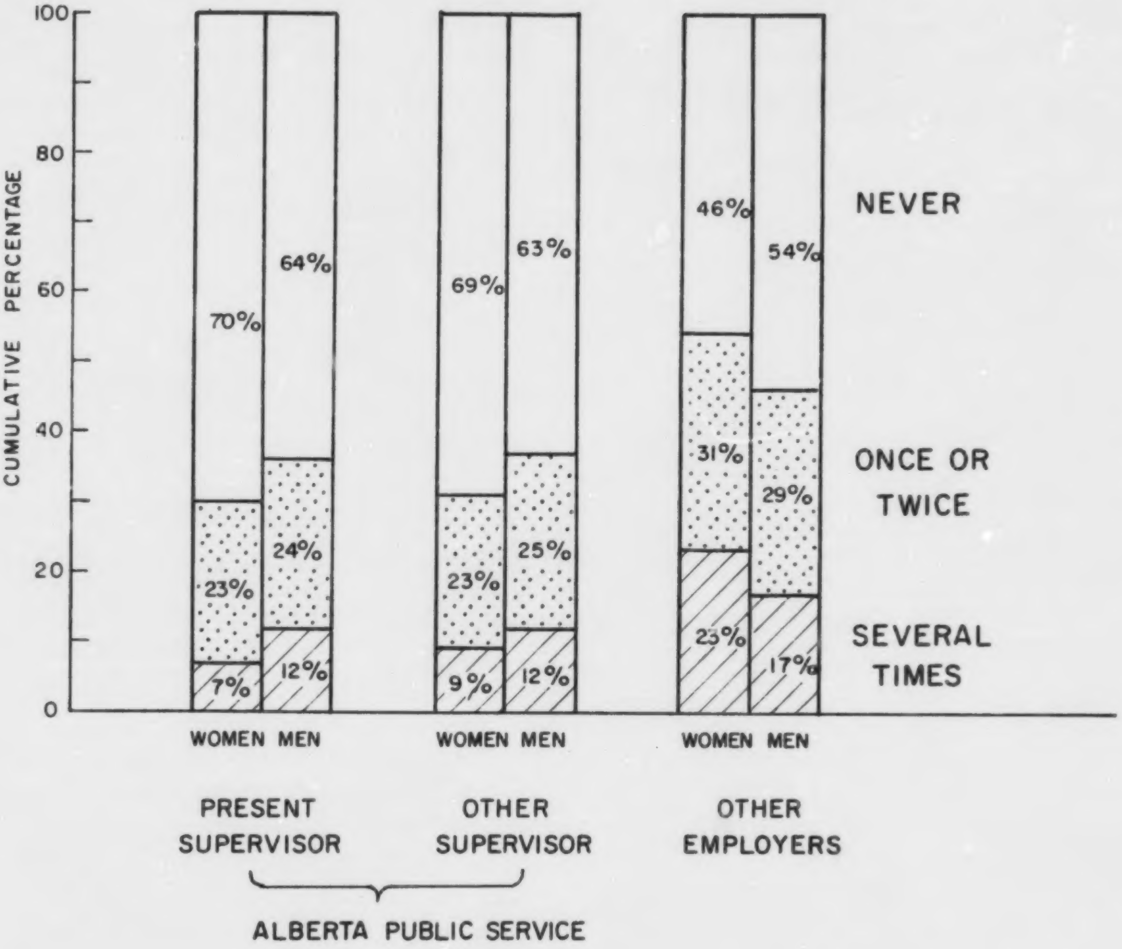
Another aspect of encouragement tapped by the questionnaire was the extent to which employees had been encouraged to apply for promotion or had received guidance and counselling related to career planning (QUESTION JJ). Employees were also asked the extent to which they would be interested in career counselling (QUESTION KK).

The findings indicate that men were more often encouraged to apply for promotion, although the differences are rather small (see FIGURE 21). Respondents were asked to indicate how often they had received such encouragement: "not at all", "once or twice", or "several times". They were asked to give this information for their present supervisor in the Public Service, any past supervisors they had had, and any other employers. Men reported somewhat higher levels of encouragement from all three sources.

Men also more often reported that they had received career counselling from their present supervisor, or that they had received such counselling more than once (see FIGURE 22). Although both men and women expressed a high level of interest in obtaining career counselling, women expressed greater interest than men. A comparison of the counselling received with the interest expressed, suggests that neither men nor women presently find that their needs are being met. However, the problem is greater for women than for men. These data also suggest that women do care about their careers and would be responsive to a counselling program.

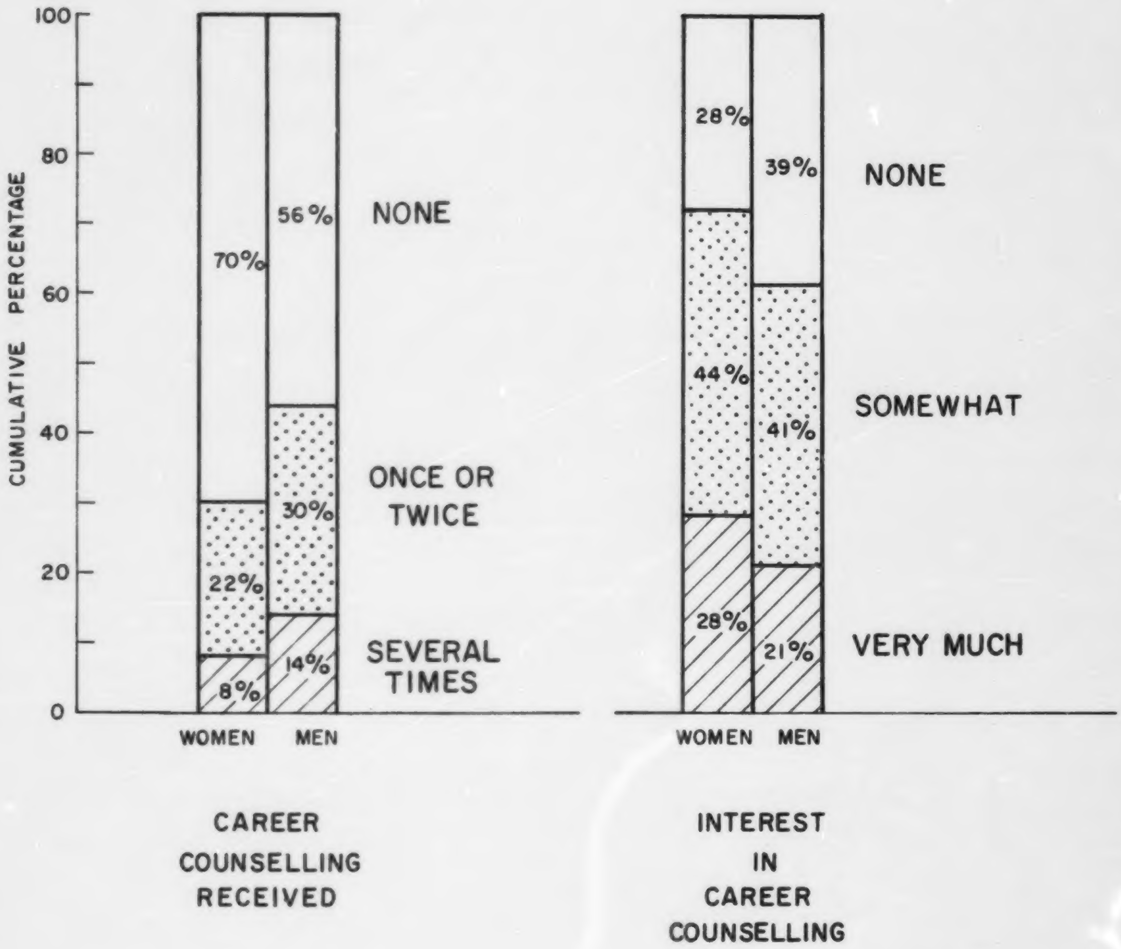
Overall, the data on mentoring show a consistent pattern which favours male employees. However, the differences are not large, and may well be related to other characteristics of the women and men in the sample.

An analysis of the encouragement received to obtain



ENCOURAGEMENT RECEIVED BY WOMEN AND MEN TO APPLY FOR PROMOTION

FIGURE 21



CAREER COUNSELLING

FIGURE 22

further education shows differences by level of education and occupational category. Employees who are already highly educated receive more such encouragement. Professional employees receive more, and Business and Clerical employees receive less. Once these and other differences are taken into account, there are no remaining differences between women and men.[21]

Similar results are obtained from an analysis of the encouragement received to apply for promotion. Professional employees, regardless of sex, receive more encouragement. However, men employed in Social Service occupations receive more than comparable women.[22]

SUMMARY OF DIFFERENCES BETWEEN MALE AND FEMALE EMPLOYEES

From the results noted thus far, it is apparent that women are more similar to men than they are different. However, consistent differences do occur. Differences occur, first of all, in the area of Formal Qualifications. Women, overall are less educated and have fewer years of job experience than do men in the same occupational category and age range. These differences are substantial. Women also make fewer Applications for promotion than do men. However, there appear to be no differences in Job Performance, as indicated by supervisors' ratings.

Differences are also found in Employee Characteristics, although they are not large. For example, differences are found in the area of Family Responsibilities. Women spend more time on household tasks, but men actually report experiencing more Interference from families in satisfying the requirements of the job. This occurs because more men than women are married and have families, and because men generally hold more responsible positions. These results suggest that the relationship between Family Responsibilities and advancement is not a simple one.

Men also express higher levels of Commitment to the job. Overall, men rate working as more important than do women. In some groups, men also express higher levels of Ambition and a greater Willingness to engage in various Activities in order to further their careers. However, these differences are small, and are not found in all groups. Finally, Social Service men receive more Encouragement to apply for promotion, but there are no differences between women and men in the degree of Encouragement received to obtain further education.

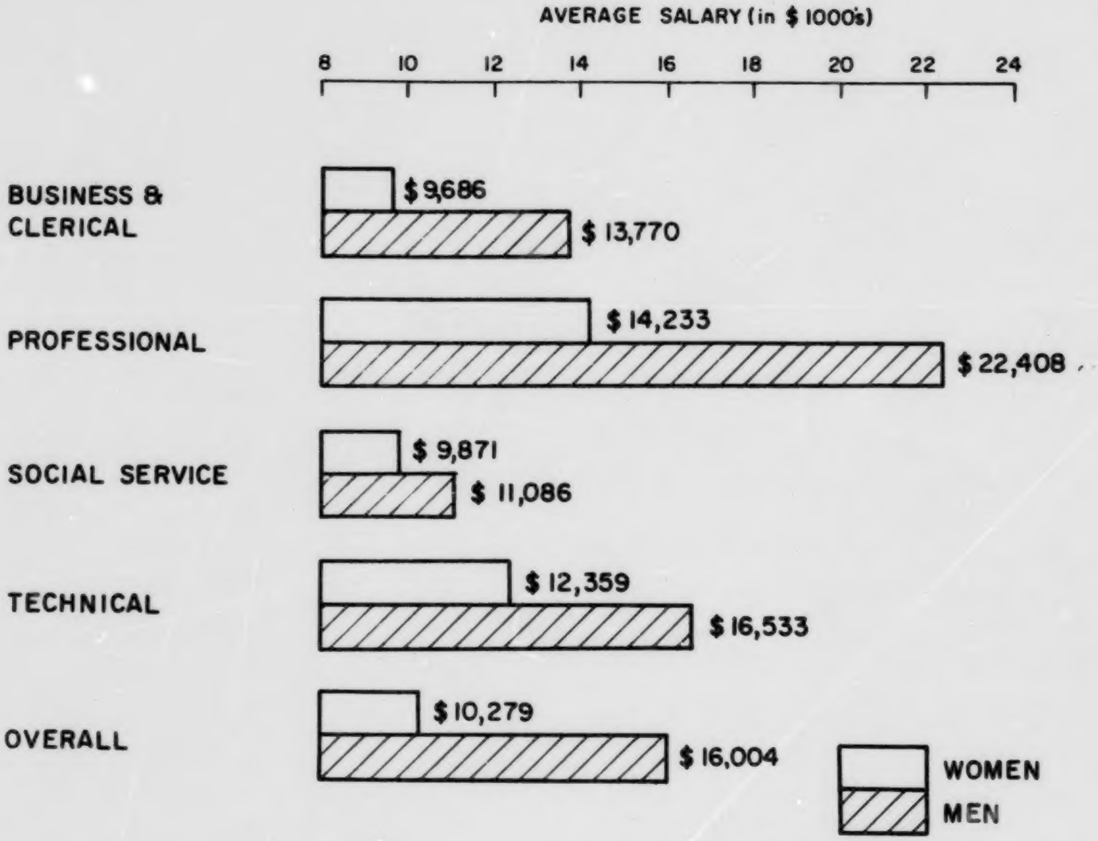
POSITION

In order to describe completely an employee's position within an organization, it is necessary to take account of such factors as salary, status, degree of responsibility and job level. However, only the first of these - salary - is easily quantified. Therefore, salary has been selected in this study as the prime indicator of position. Some data on supervisory responsibility are also presented but the analyses focus on salary.

Within the Alberta Public Service as a whole, the average annual salary for men in 1977 was $17,437. The average annual salary for women was $11,334, or 65% of the salary earned by men. Within the population sampled in 1978, the survey results yield an estimated average of $16,004 for men and $10,279 for women, a ratio of 64%.

Gunderson (1976) reports that the salary ratio of women to men for Canada as a whole is 60% in service and public administration industries. Thus, women in the Alberta Public Service are in a somewhat better position than women elsewhere throughout the nation. Gunderson also finds that the ratios vary by occupational group within industries. The same is true within the Alberta Public Service, although the relationships are different from the ones he reports (see FIGURE 23).

Within the Social Services category, women earn amounts which are more nearly equal to that of men (89%), mainly because the earnings of the men are relatively low. Technical women fare relatively well, earning 75% of the salary of men. Business and Clerical women earn 71% as much as men. At 64%, the ratio of Professional women's salaries is the lowest of



AVERAGE SALARY OF WOMEN AND MEN

FIGURE 23

the four occupational groups.

This salary discrepancy reflects, in part, differences in supervisory responsibility. Only 34% of the women, but 60% of the men, are responsible for supervising one or more employees. Of those who supervise, men supervise a greater number of other employees (an average of 4.2 vs. 3.4). As well, more men are at higher levels of management, supervising employees who themselves have supervisory responsibilities (54% of male supervisors vs. 29% of women supervisors).

This pattern does not hold for Professional employees. Within this group all three supervisory indices are quite similar for men and women. In fact, slightly more women than men supervise more people (an average of 4.7 vs. 4.5).

However, these women are more often in first level management positions; fewer women supervise employees who, in turn supervise others (53% vs. 62%).

DETERMINANTS OF SALARY

QUALIFICATIONS

Data presented in the preceeding sections suggest that the lower position of women may be, at least partly, due to differences in qualifications. By simply looking at the descriptive indices of position, it is impossible to determine whether this is the case, or whether even well qualified women are at a disadvantage in the system.

The descriptive information also fails to reveal which particular qualifications are most important, and thus, where a program designed to improve the position of women should focus in order to achieve maximum effect. For example, the descriptive information clearly shows that women have considerably less job experience than men. However we cannot evaluate the effect of this difference, unless we know how important experience is to promotion. It may be that seniority is not a significant factor of advancement within the Alberta Public Service.

Beginning students of statistics are frequently cautioned about drawing inferences from single relationships by a story about the statistician who discovered a correlation between the number of storks nesting in old European cities and the birth rate. This is, in fact, a true relationship. However, the causal factor is economic prosperity. When times are good, people are more eager to expand their families. Rather incidentally, the populace as a whole has more money to spend on fuel. The fires keep the chimneys in the city warm, and it is in the chimneys where the storks nest and lay their eggs. If economic prosperity is taken into account, the apparent relationship between storks and babies disappears.

There is a statistical procedure which makes this possible, and allows one to look at the effect of various factors in combinations, determine how they interact and the extent to which they influence employees' success.

In proceeding with this part of the analysis, it is important to retain the distinction between Qualifications and Characteristics. Qualifications are those objective variables, it will be recalled, upon which hiring and promotion decisions should depend rather directly. They include Experience, Education, Performance and Applications. Employee Characteristics are more subjective variables and include Time spent on household tasks, Interference from family, Importance of a career, Ambition, and Activities. These are variables which operate more indirectly.

It would not be considered legitimate for a woman to be refused a promotion because of family responsibilities. However, she could fail to advance because family responsibilities had prevented her from obtaining the necessary education and experience. Two other variables included under employee Characteristics relate to the organization - the Encouragement it gives employees to obtain further education, and Encouragement to apply for promotion.

The first part of the following analysis focuses on Qualifications. The goal is to determine which of these variables influence position attained, to what degree, and whether any differences remain between males and females which cannot be explained by differences in these variables. In performing these analyses, employees' salary was used as the measure of the position they had attained.[23]

The analyses show that Education, Experience, and Performance all have significant effects on salary. Each point of education is worth about $900 in yearly income. Thus, for example, employees can expect to increase their salary by this amount for each year of university training, or for two years of community college training. The reader can compute the value of other types of educational credentials, using the weights for them described on pages 68-70.

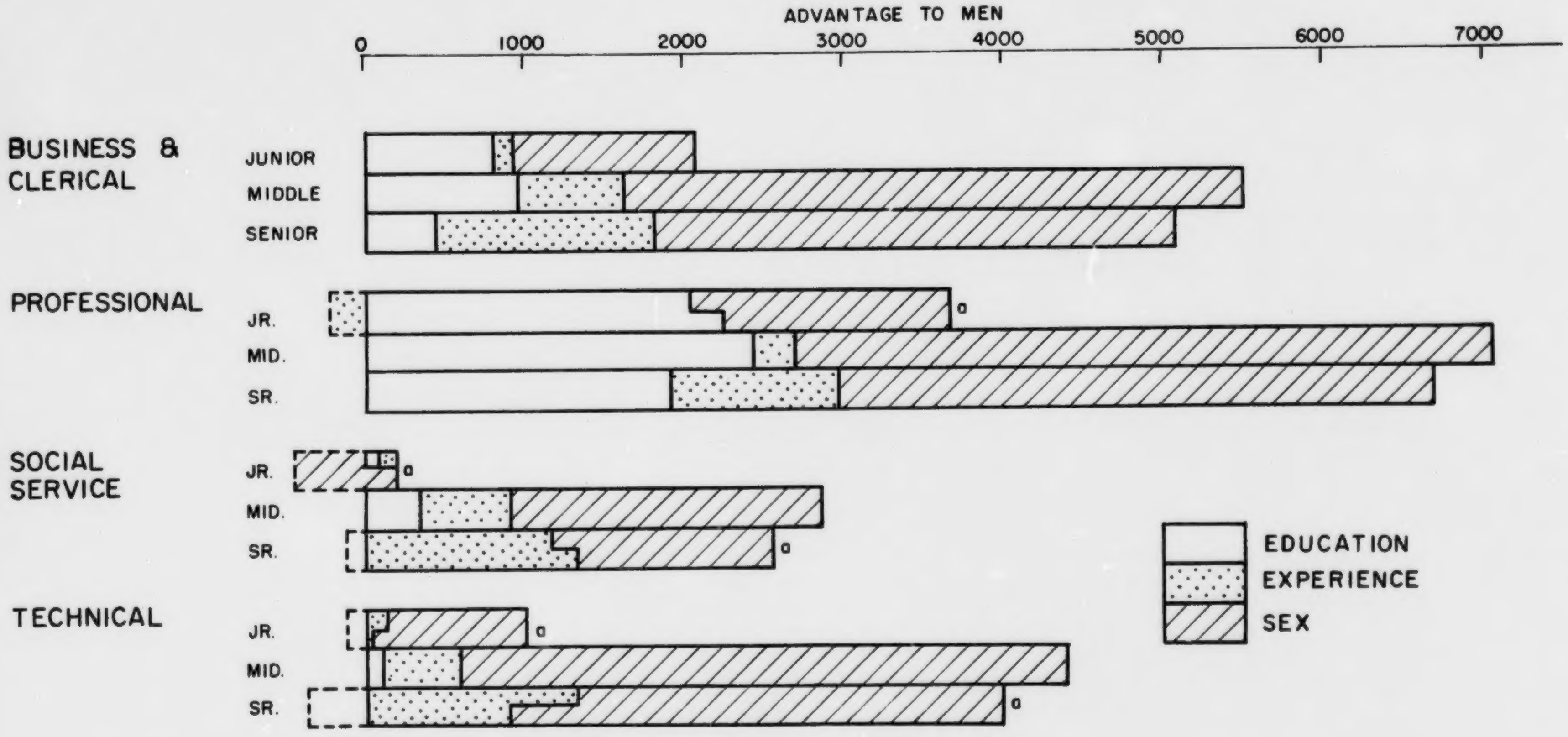
Years of Experience is also important. Each year with the Alberta Public Service increases an employees' salary by $175. Performance is important as well. Each point advance on the Performance scale earns $694. Thus an employee rated "Satisfactory" earns $694 than one rated "Unsatisfactory", and an "Outstanding" employee earns $1388 more than an Unsatisfactory employee in the same category. Rate of Applications, however, does not have a significant effect on salary.

However even when these factors are taken into account, plus the differences in age and occupational group membership, a significant differential in salary between men and women still remains. Over all categories, this amounts to $3,097. This difference is considerably less among Social Service employees, where men's salaries are also low. Here the discrepancy is only $1,319.

A more detailed analysis provides a clearer picture of how the discrepancy comes about. On all qualifications shown to effect salary, women advance less than men for equivalent standing. Women earn only $689 per education point, while men earn $1,005. Women earn only $145 for each year of Experience, while men earn $210. Women earn $427 for each Performance point, while men earn $913.[24]

Recall that the average salary difference between women and men in the survey population was roughly $5,700. It has been established that Education, Experience and Performance affect salaries, and that a difference associated with sex remains. Further, the study has demonstrated that women advance less for each type of qualification they obtain, but that they are also, generally speaking, less well qualified. It would be interesting to know exactly how much women lose because they are less well educated and have less experience, and compare this to how much they lose solely because they are women.

An analysis was performed to answer these questions, and the results are summarized in FIGURE 24.[25] The analysis shows



SALARY DIFFERENCES DUE TO EDUCATION, EXPERIENCE AND SEX ALONE

FIGURE 24

[a] Some overlapping occurs because, in a few instances, women are actually advantaged over men, and there is thus some cancellation of effects. For example, among Junior Professional women, disadvantage accrues to men because they are less well educated, but this is then overridden by the effect of sex.

that level of education has a strong overall effect. The difference between men and women in the level of training attained, accounts for a large part of the difference in salary between male and female employees. This varies considerably by occupational category. Among junior and senior Technical employees, women show a several hundred dollar advantage because they are better trained than men in the same category. Women show a similar advantage in the senior Social Services category. However, Business and Clerical women experience substantial decrements due to education, reaching $1300 in the senior group. In the Professional group, the difference due to education is larger still, about $2000. In other words, women earn this much less than men in the various groups because they are less well educated.

An employee's years of Experience are also important. Here women lose an additional amount because they have not worked for as many years. The loss due to experience is relatively constant in all groups. It ranges from about $100 for junior employees, through $500 for middle, to $1300 for senior employees. There appears to be somewhat of a tradeoff between Education and Experience. Among Business and Clerical and Social Service employees, Experience is the qualification which accounts for more of the difference in salary. However among Professionals, Education is more important.

The previous analysis showed that Performance on the job also affects salary. However since women and men do not differ on this variable, it does not help to explain salary differences between them. Rate of Application has no effect on salary, and, therefore, is also not helpful in explaining salary differences.

These two variables together - Education and Experience - account for less than half of the difference between men and women in salary. The remainder is associated solely with sex. That is, even when looking at women and men who have equal experience and training, women earn less than comparable men. And the effect of being a woman results in a greater reduction in salary than being uneducated, inexperienced and incompetent.

The effect of sex varies somewhat according to age and occupational group. First of all, it is obvious that employees in the middle years earn the most, followed closely by seniors. Junior employees earn considerably less. There are also substantial differences by occupational category. Professionals earn the most, trailed at a significant distance by Technical, then Business and Clerical, and finally, Social Service employees.

The discrepancy between the sexes is least (about $1000), among junior employees where salaries are low. It increases to between $2000 and $4000 at the middle and senior levels. The discrepancy between men and women associated with sex is greatest in the Professional category, where salaries are again high. This group is followed by Business and Clerical, then

Technical, and finally, Social Service employees. In the latter category, the differential is considerably reduced. It thus appears that the differential associated with sex increases as one moves up through the occupational levels.

It is also interesting to observe that men appear to be disadvantaged by their sex in the junior Social Services category; that is, men earn less than comparable women. The Social Services category may be viewed as an extension of the traditional female role, in that jobs involve the nurturing function. It thus appears that men may also be the victims of sex role stereotyping, although it must be noted that this is only true for junior Social Service employees.

Gunderson concludes, after examining a number of studies, that the wage gap between women and men narrows from about 65% to about 85% when differences in qualifications are taken into account. This means that roughly 57% of the differential between women and men is due to qualifications, and only about 43% to sex alone. Gunderson's findings are somewhat different from those of the present study, where 54% of the difference was associated with sex. This probably reflects the fact that the Alberta Public Service represents a relatively high strata of the labour force as a whole. Within the Alberta Public Service, the differential associated with sex increases with rank; therefore it is not inconsistent to expect that the effect associated with sex is greater throughout the Public Service compared to the labour force as a whole.

OTHER EMPLOYEE CHARACTERISTICS

The other variables which the Survey examined are of a more subjective nature, but they may also determine advancement. This may occur in a number of ways. For example, a subjective variable may impact on an objective variable. The data on interruptions in career history show that Family Responsibilities curtail the acquisition of both job experience and qualifications by women. Variables of a motivational character may influence hiring and promotion decisions rather directly. For example, supervisors may be aware of employees' commitment to the job and their desire to advance, and be more likely to hire or promote persons whom they perceive to be highly motivated.

These measures may also indirectly reflect the job performance of employees. Employees who score high on such variables as Activity, Ambition, and psychological Importance of a career, may also perform better on the job in ways that the performance appraisal does not tap. Likewise, employees who spend a lot of time on household tasks may have less energy to expend on acquiring new skills within their current job and it is these new skills which might prepare them for more demanding positions in the future.

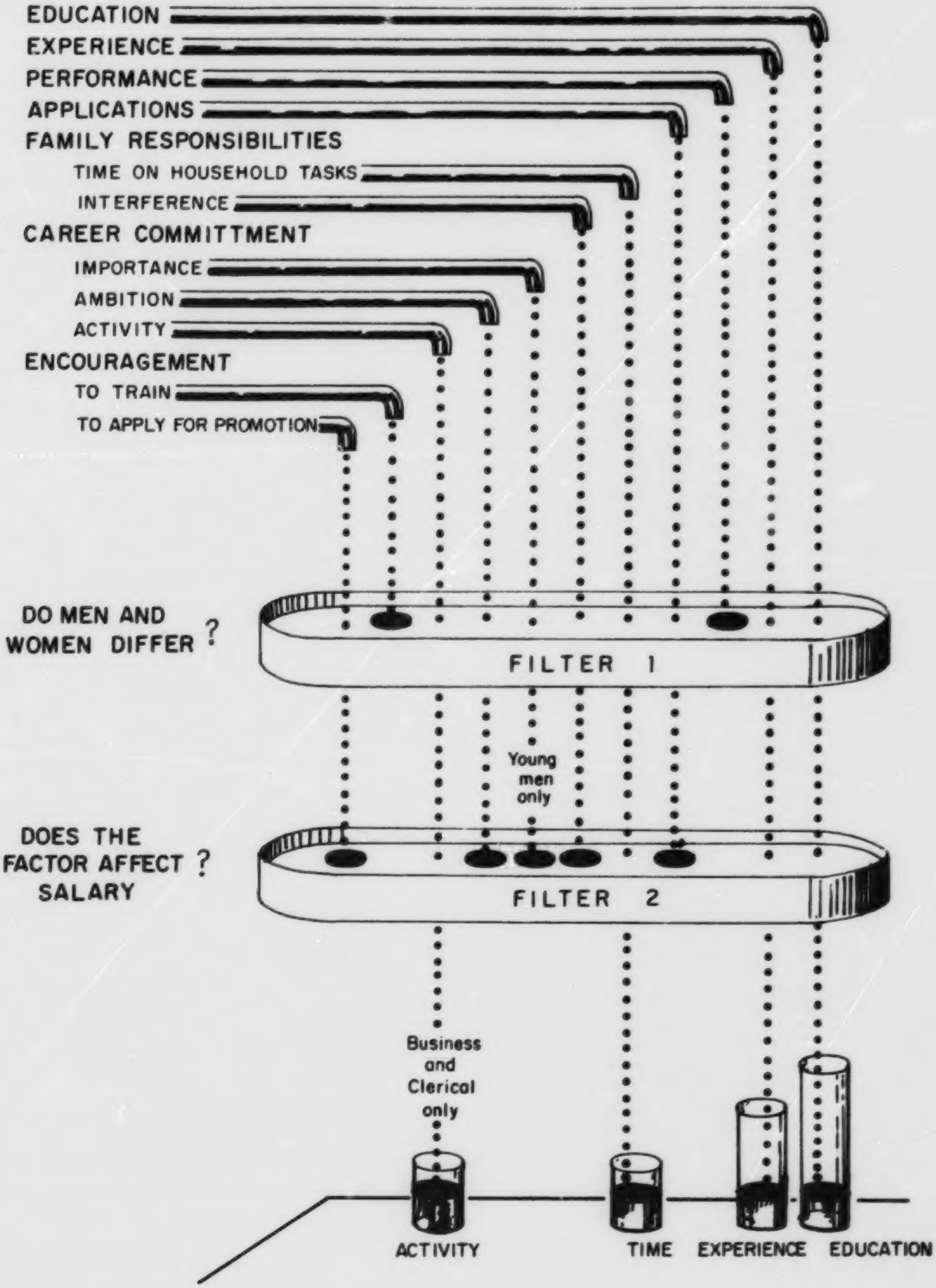
In order to assess these possibilities, an analysis was performed which included all of the major variables tapped by the survey, both Qualifications and Characteristics.[26] The results indicate that some employee Characteristics do affect salary.

Time spent on household tasks has a negative effect. Its size is such that each hour spent weekly on household tasks is associated with a $24 reduction in yearly salary. Since women spend more time on such tasks, they are generally penalized more than men. Interference, however, has a positive relationship to salary, an effect which advantages men since they report higher levels of interference. However this can only be viewed as the result of position, rather than a cause. It is not reasonable to suppose that interference from family leads to advancement. Rather, it is the other way around - advancement results in increased job responsibilities which, in turn, interfere with family life. These results emphasize again the fact that Family Responsibilities has a psychological component and, therefore, that it is possible for employees to exercise considerable control in this area. However, since the effect on salary for Interference is so small, it has not been included in FIGURE 25, which is described below.

Importance of a career and Ambition, two variables on which men score higher than women, have no direct impact on salary. Activities which employees would undertake did have a significant impact. Each "yes" response was associated with a $119 increase in salary. This relationship benefits Business and Clerical men, since men score higher than women in that occupational group. However, in the remaining three occupational categories, women and men have similar scores. Activities is thus only marginally useful in explaining the salary differential between men and women.

Encouragement to obtain further education and Encouragement to apply for promotion are not related to salary differences between women and men. Although Encouragement to obtain further education is associated with increased salary, it has been shown that women and men within the same category have similar scores. Men, overall, receive more Encouragement to apply for promotion, but this variable does not relate to salary.

FIGURE 25 summarizes the results of the analysis. Each variable investigated is listed on the FIGURE. As well, the FIGURE indicates whether women and men within an occupational and age group differ on the variables in question, and whether the variable has a significant relationship to salary. Both of these must have a "yes" answer in order for the variable to be useful in explaining the salary discrepancy between women and men. The figure also indicates, for each variable, when this is the case.



RELATIONSHIP OF FACTORS TO SEX DIFFERENCES IN SALARY

FIGURE 25

There are four variables which are shown to be useful: Education, Experience, Time on household tasks and Activities. Education and Experience are the most important, since they are associated with substantial salary differentials which cut across each group. Time on household tasks is associated with a small reduction in salary. Activities is responsible for some of the salary differences within the Business and Clerical group.

It is important to note that, even when all of these subjective variables are included in the analysis, significant effects associated with sex still remain.[26]

ATTITUDES

There is a fairly substantial body of research which shows that men are viewed more favourably as employees than women. Starting in the early 1970's, the Brovermans and their associates found that college students were more likely to attribute positive traits such as competence and rationality to men than to women (Broverman et al, 1970). Schein (1973) found that traits identified as necessary for effective management within the insurance industry were more often ascribed to men than to women. A more recent study of managers in a cross-section of organizations shows that the same perceptions still exist. Men were perceived to be more likely to have the aptitudes necessary for a management position: the interest and motivation and the temperament and work habits (Rosen & Jerdee, 1978).

It is known that women also hold negative attitudes toward other women, although the attitudes of women are more favourable than are men's attitudes toward women (Peters, L.H. 1974).

The final section of the questionnaire assessed respondents' attitudes toward women in employment (QUESTION SS). A number of existing instruments served as the source for items, including The Women as Managers Scale (Peters, L.H. et al, n.d.) and The Attitudes Toward Women Scale (Spence, J. and Helmreich, R., n.d.).

Existing items were selected based on their demonstrated reliability and validity. Items were modified as necessary and additional items were generated to ensure that the scale would be relevant to the Alberta Public Service. The completed scale had the following characteristics:

- Items related only to employment, since general attitudes toward women might be very different from attitudes toward women at work.
- Items described attitudes toward women at work in the following areas: job related skills, suitability for advancement, and the desirability of implementing an affirmative action program within the Alberta Public Service.
- Items covered the spectrum of opinion from "conservative" to "radical".

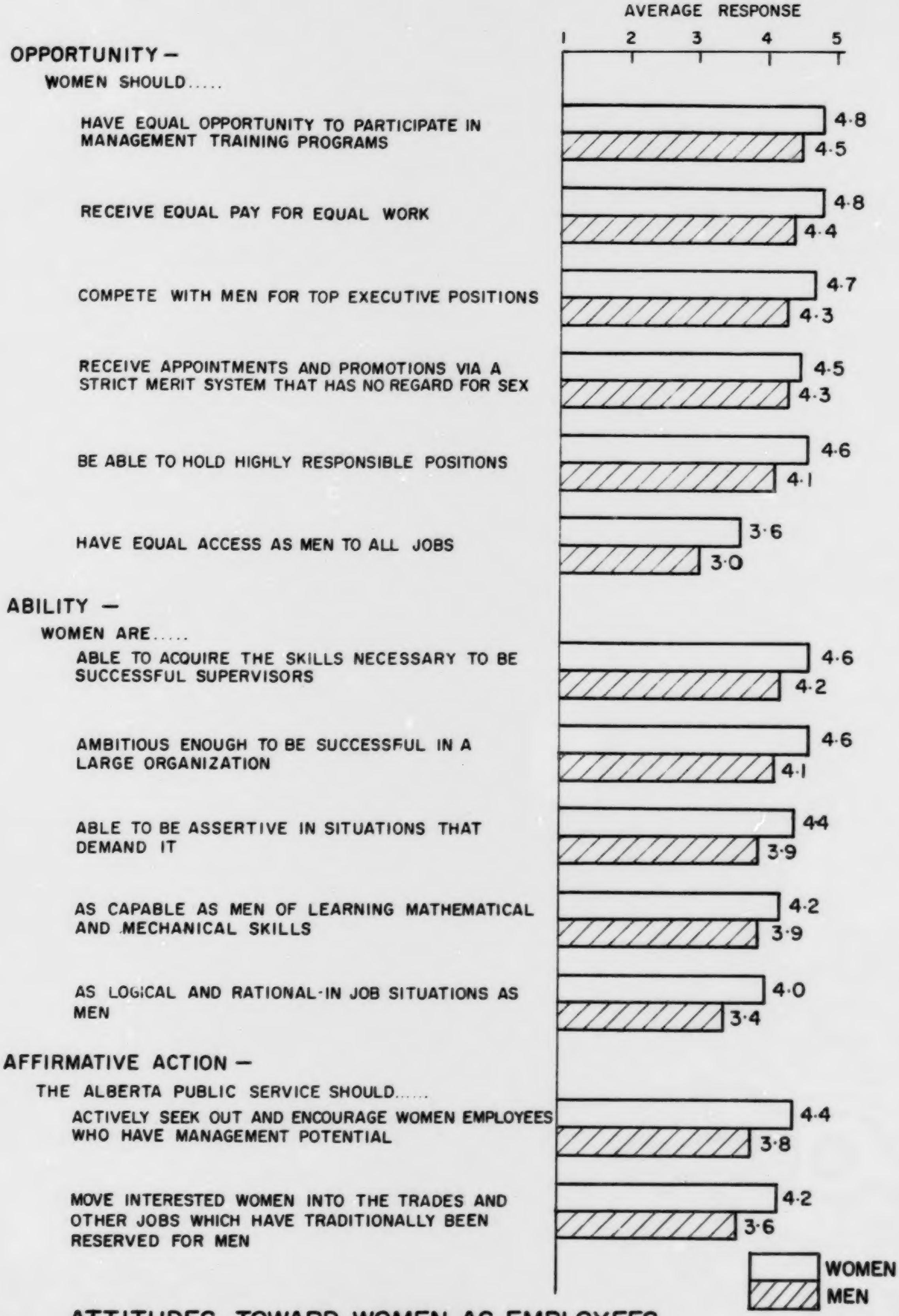
* Items were approximately evenly divided between those worded in a "conservative" and in a "radical" direction.

Each item that was developed expressed an opinion, either favourable or unfavourable toward women at work. Respondents were asked to indicate their agreement on a 5-point Likert-type scale.[27]

The results, which appear in FIGURE 26, indicate that many employees in the Alberta Public Service, like individuals in society at large, hold opinions about women in employment which are somewhat negative. It can also be seen that women have more favourable attitudes toward other women than do men: women fairly consistently exceed men's scores by half a point.

Generally speaking, the most favourable opinions were reported in the area of "Opportunity". Most people, both men and women, felt quite strongly that it is suitable for women to hold responsible positions, to compete with men for top positions and to receive equal pay for equal work. However, respondents were not as convinced that women in general, had the skills to succeed in management positions.

Women were frequently thought to be less able to acquire supervisory skills, to be insufficiently ambitious and assertive, to be less capable of learning mathematical and mechanical skills and to be less logical and rational. Attitudes toward



ATTITUDES TOWARD WOMEN AS EMPLOYEES
FIGURE 26

an active program designed to help women - which included moving women into non-traditional jobs and actively encouraging women who have management potential - were less favourable still.

There were some differences in attitudes among the four occupational categories. However, these were rather slight and not totally consistent for men and women. It does appear, however, that Social Service employees hold slightly more negative attitudes than the other groups.

There is also a consistent trend for attitudes to be more favourable in the younger age groups, although the differences are not always significant and never very large.

Thus it is apparent that employees in the Alberta Public Service hold attitudes toward women as employees which are somewhat negative. On the part of the women, these attitudes are likely responsible for their lower qualifications. On the part of men, especially managers, negative attitudes result in a system which fails to advance even those women who are well qualified. The discrepancy in attitudes between women and men within the organization indicates a point of imbalance and conflict.

FOOTNOTES

1. In deriving all of the descriptive statistics, data were appropriately weighted by the population and final sample size of each age and occupational group. Age weightings were done by the 5 year categories used in deriving the sample, rather than the 3 composite categories upon which the analysis is based. Thus, each statistic is an unbiased estimate of the value for the group under discussion. However, further statistics should not be computed from the data presented as they would not be properly weighted.

2. All of the education variables were entered into a regression against SALARY, using dummy variables where appropriate. Other variables (Job Performance, years of Experience, Occupational Category, Sex, Age, and whether or not the employee was a manager) were included as control variables. A number of stepwise analyses were performed, with the control variables included in various orders and combinations. Inspection of the resulting Beta weights suggested the weighting given in the text. These weights represent the contribution of various groups of credentials to SALARY across the various groups of which the sample was composed. The results showed that apprenticeship training, and obtaining multiple degrees at a particular level did not have significant effects. Thus, these variables were excluded from subsequent analyses.

3. The remaining educational variables did not contribute to salary, including those describing Apprenticeship Training. This is not surprising, since the trades are not represented in any Occupational groups involved in the survey. Graduation from a diploma program did not increase an employee's salary over and above the increases accruing from years of training. Likewise, having completed more that one program at any level yielded no further benefit.

4. Each of the variables served as the dependent variable in a stepwise multiple regression analysis. The primary purpose of each analysis was to determine whether men and women showed significant differences on the variable in question when Age, Occupational Category and Sex were controlled. These were entered as dummy variables to assess their main effects, as well as the Interactions of Sex with Age and of Sex with Occupational Category. Preliminary regressions with SALARY as the dependent variable showed that the interactions of Age with Occupational Category, and the three-way interactions of Sex, Age and Occupational Category did not significantly improve the equation. Thus, these interactions were not included in any of the analyses to be presented here. TABLE A1 summarizes the results of the regressions on each of the Qualification variables, and TABLE A2 presents the same information for Characteristics.

5. Column 1 of TABLE A1 summarizes the results of the regression on the total Education score. Although there is no significant main effect for sex, sex shows significant interactions with age and occupational group. The Beta weights resulting from the equation were used to derive the differences presented in FIGURE 6.

6. Four experience variables (Alberta Public Service/Full Time, Alberta Public Service/Part-Time, Other Employers/Part-Time) were entered as dummy variables into the same set of equations used to composite education. The Beta results suggested that full-time experience with other employers should be discounted by half. Part-time experience did not have a significant effect on salary and was ignored in all subsequent analyses.

7. Column 2 of TABLE A2 summarizes the results of the analyses of the composite Experience score as a dependent variable. The results show a main effect for sex, with men outscoring women. This main effect, however, is somewhat attenuated by the interactions of sex with age and occupational category. This is, no doubt, a result of the education level attained by men which retards their entry into the work force. However, the main effect for sex overrides the interactions.

8. In two previous studies teachers were asked to report on their effectiveness in various areas of work. The results did relate to how far they had advanced within their profession. (See Reich, 1975: Reich and LaFountaine, 1976)

9. The 3 performance measures (Item Self Rating, Overall Self Rating, Supervisor's Rating) were included in the equation used to composite Education and Experience. Consistent relationships to salary occurred only for the supervisor's rating. Therefore, it alone was retained.

10. Column 3 of TABLE A1 summarizes the regression on Performance as a dependent variable. There is no main effect and no interactions involving sex.

11. In some cases the success rates exceed 100%. This is due to the fact that some transfers were effected without employees having to apply directly. This must be kept in mind when interpreting the 100% success rate of women overall. It is unlikely that all direct applications were successful.

12. Column 4 of TABLE A2 summarizes the results of the regression on the composite Applications score as a dependent variable. Significant sex by group interactions show that men make more vertical applications than comparable women in all occupational groups except Technical.

13. Data in the 1st column of TABLE A2 shows that sex has a significant effect on the hours spent on household tasks even with other factors controlled. This means that women spend more time on such tasks than men of comparable age and background characteristics.

14. Intercorrelations among the four items were all positive, averaging .60. Column 2 of TABLE A2 shows that men experience significantly more total Interference than comparable women.

15. The intercorrelations among all 4 parts were positive, averaging .48. QUESTION FF was not included because its relationship to the other items was less satisfactory.

16. Column 4 of TABLE A2 shows the regression analyses of the total Commitment score. The main effects for Age, Experience and Occupational Group are visible. There is no main effect for sex; however, the two significant interactions between Sex and Age indicate that men generally score higher, as does the interaction of Sex with Occupational Group.

17. The average correlation of this item with the remaining four was .33.

18. The pilot version of the questionnaire contained 9 items, 3 of which were eliminated because they did not differentiate well among employees. Intercorrelations in the survey data among the remaining 6 items averaged .29. Thus relationships were low. Employees were generally selective in the activities they were willing to undertake.

19. A total score on this measure was computed by summing the number of "yes" responses. Column 6 of TABLE A2 shows the pattern of relationships emerging from the analyses of this factor as a dependent variable. A number of background characteristics have significant relationships to Activities. The single effect for sex is an interaction with the Business and Clerical category, which indicates that men in the category score higher than comparable women.

20. The results of regression analyses with Ambition as a dependent variable show the single effect for sex noted in the text - an interaction of sex with age. Although the descriptive data show large differences among occupational categories, which are noted in the text, these differences are not supported by the statistical analyses, which in fact, shows Professional employees scoring lower. It is likely that the differences by Occupational group are partially obscured by the effect of Education, which does

have a positive relationship to Ambition. The negative regression weight attached to the Professional category may reflect a ceiling effect which is due to the fact that most managers are in that group.

21. A composite score was derived for Encouragement received to obtain further education by averaging the ratings for the Alberta Public Service and other employers. The main effects for Education and Occupational Category noted in the text are evident from the results of the regression on the composite variable given in Column 3 of TABLE A2. Main effects for Job Performance and Age are also visible. There are no main effects and no interactions involving Sex.

22. A composite score was derived for Encouragement to apply for promotion by averaging the rating given the 3 categories of supervisors. The regression on the composite score as a dependent variable reveals the one sex by Occupational Group interaction reported in the text.

23. A regression was run on salary with the control variables and formal qualifications as independent variables. The list of variables included in the equation is given in the first column of TABLE A3. The regression was appropriately weighted to reflect the distribution of managers across the various sex, age, and occupational categories. Column I of TABLE A3 summarizes the results of the analysis, with the Beta weight associated with each variable expressed in salary dollars. The results were used to compute the remaining differences in salary among groups that were due to sex alone, and not associated with differences in qualifications.

24. A similar regression was done on salary, adding the interactions of sex with the formal qualification variables. The results are summarized in Column II of TABLE A3.

25. The differences due to various factors were determined as follows:

    1. A weighted regression was run with control variables to determine overall group differences in salary. The results are summarized in Column III of TABLE A3.

    2. For each formal qualification variable, an expected salary value was computed for each employee by multiplying their score on the variable in question with the appropriate Beta weight as calculated from regression I in TABLE 3A. For example, the dollar value of education was the education score x $900; the value of experience was the experience score x $175, etc. Regressions were run on each of these composite variables in order to determine the group differences in salary associated with each one.

3. A previous regression (see note 23) was used to calculate the differences among groups that were due to sex alone.

TABLE A5 summarizes the results of this series of analyses. The dollar values associated with each of the qualification variables and with sex alone are presented in the TABLE. Previous analysis showed that performance rating did not differ significantly between women and men (see TABLE A1). Although there is a significant difference in applications between women and men (see TABLE A1), applications did not significantly affect salary (see TABLE A3 , regression I). The analysis of group differences in the dollar value of applications did show significant interactions of sex by occupational category (see TABLE A4). However, they were extremely small. For these reasons, salary differences due to performance and applications were not discussed in the text nor included in FIGURE 10. However, for purposes of completeness, they are represented in TABLE A5.

26. A regression was run on Salary which included sex, all of the control variables, their interactions with sex, the qualification variables and their interactions with sex, plus employee characteristics. Including the interactions of sex with characteristics in the equation only explained an additional 0.3% of the variance. Therefore, these interactions were not retained. The results are summarized as regression IV of TABLE A3.

27. Eight items originally included in the draft questionnaire were eliminated on the basis of pilot testing because they either did not relate well to the other items or were redundant. Two items included on the final questionnaire were eliminated prior to the analysis stage for similar reasons. The items retained showed an inter-item correlation on the survey of .27. Preceding the analysis, the scores of negatively worded items were reversed so that the respondents' scores expressed the extent to which they held attitudes toward women that were favourable.

TABLE A1

Regression Results on Qualification Variables

(Beta Weights)

Explanatory	Qualification Variables			
Variables	Education	Experience	Performance	Applications
Sex[a]	-.47	7.56*	.03	.16
Age - Young	.38*	-10.69*	-.09*	-.23
- Middle	.31	-4.95*	-.07	-.05
Group				
- Bus. & Cler.	-1.81*	.73	-.007	-.36
- Prof'l	.93*	.57	-.02	-.56*
- Soc. Serv.	-2.11*	-1.02*	-.26*	-1.44*
Sex by Age				
- Young	.32	-6.83*	-.09	-.47*
- Middle	.57*	-4.21*	-.07	.33
Sex by Group				
- Bus. & Cler.	1.00*	.09	-.06	1.97*
- Prof'l	2.65*	-1.78*	.04	.84*
- Soc. Serv.	.27	-.03	.11	1.13*
Constant	3.06	14.90	3.01	2.49
R Square	.39	.55	.02	.09

a Females are coded as "0" and males as "1"
Therefore positive values indicate higher scores
for males and vice versa

* F value is significant at the .05 level or beyond

TABLE A2

Regression Results on Employee Characteristics

(Beta Weights)

Explanatory Variables	Employee Characteristics						
	Time	Interference	Commitment	Ambition	Activities	Encouragement To Train	Encouragement To Apply
Sex[a]	-4.99*	.17*	.03	.12	-.15	.13	.03
Age - Young	-2.12*	.18*	-.59*	.39*	1.15*	-.13*	.05
- Middle	3.35*	.33*	-.28*	.40*	.41*	-.06	.04
Group							
- Bus & Cler.	.61	.09	-.26*	.11	-.42*	-.21*	.04
- Prof'l	2.22*	.20*	-.28*	-.28*	.02	.18*	.12*
- Soc. Serv.	4.14*	.20*	-.06	-.62*	-.70*	-.03	.01
Sex by Age							
- Young	3.36*	-.22*	.47*	.29*	.09	-.03	-.02
- Middle	-1.36	-.09	.22*	-.07	.00	-.05	-.02
Sex by Group							
- Bus & Cler.	-2.22*	-.18*	.34*	-.11	.46*	.16	.01
- Prof'l	-1.66*	-.05	.18	.02	-.05	-.02	.03
- Soc Serv.	-3.38*	-.12	-.03	.25	.18	-.08	.26*
Education	-.28*	.009	.004	.06*	.14*	.03*	.00
Experience	-.03	-.005	.01*	-.02*	-.02*	-.007*	.00
Performance	.79*	-.02	.03	.14*	.13*	.12*	.09*
Applications	.27*	.01*	-.008	.09*	-.09*	.009	.03*
Constant	19.55	1.39	4.10	1.64	1.39	1.75	1.02
R. Square	.11	.05	.11	.21	.21	.06	.08

a Females are coded as "0" and males and "1"
Therefore positive values indicate higher scores
for males and vica versa

* F value is significant at the .05 level or beyond.

TABLE A3

Regression Results of Formal Qualifications on Salary

(Beta Weights expressed in dollars)

Explanatory Variables	I (note 23)	II (note 24)	III (note 25)	IV (note 26)
Sex	$3097*	- 374	4017*	- 582
Age - Young	592	- 190	-1530*	-458
- Middle	364	303	-1801	182
Groups				
- Bus & Cler.	-1613*	-1956*	-3105*	-1917*
- Prof'l	789*	1020*	1715*	963*
- Soc. Serv.	-1403*	-1889*	-3655*	-1797*
Sex by Age				
- Young	-2113*	-1302*	-3018*	-112*
- Middle	622*	928*	3448	934*
Sex by Group				
- Bus & Cler	253	698	1120*	672
- Prof'l	625	62	2713*	500
- Soc. Serv.	-1778*	-1031*	-1475*	-1044*
Education	900*	689*	**	647*
Experience	175*	145*	**	153*
Performance	694*	427*	**	410*
Applications	-7	34	**	21
Sex by Qualifications				
- Education	**	316*	**	327*
- Experience	**	65*	**	64*
- Performance	**	486*	**	481*
- Applications	**	-63	**	-56
Time	**	**	**	-25*
Interference	**	**	**	444*
Commitment	**	**	**	-93
Ambition	**	**	**	44
Activities	**	**	**	106*
Encouragment				
To train	**	**	**	250*
To apply	**	**	**	-166
Constant	8374	10154	15796	9926
R. Square	.66	.67	.51	.67

* F value is significant
at the .05 level or beyond

** Variable not included in the equation

TABLE A4

Regression Results to Determine the Dollar Value of Group Differences in Formal Qualifications

(Beta weights experessed as dollars)

Explanatory Variables	Education	Experience	Performance	Applications
Sex	- $418	$1323*	$18	-1
Age - Group	337*	-1871*	-60*	2
- Middle	274	-866*	45	.40
Groups				
- Bus & Cler.	-1625*	127	5	2
- Prof'l	832*	100	-11	4*
- Soc. Serv.	-1899*	-179%	-183*	10*
Sex by Age				
- Young	291	-1195*	-6	3
- Middle	508*	-737*	-47	-2
Sex by Groups				
- Bus. & Cler.	902*	16	-38	-13*
- Prof'l	2378*	-312*	27	-6*
- Soc. Serv.	240	-6	76	-8*
Constant	2750	2606	2083	-17
R. Square	.39	.55	.02	.09

* F Value is significant
at the .05 level or beyond

TABLE A5

Summary of the Effects of Qualifications and Sex Alone on Salary

(Expressed in Dollars)

Group	Factor	Age		
		Junior	Middle	Senior
Business and Clerical	Education	$ 775[a]	$ 992	$ 484
	Experience	144	603	1339
	Performance	-26	-67	-20
	Applications	-11	-17	-14
	Sex alone	1236	3971	3350
	TOTAL	2118	5482	5139
Professional	Education	2250	2467	1960
	Experience	-184	275	1012
	Performance	39	-2	45
	Applications	-4	-9	-7
	Sex alone	1608	4343	3721
	TOTAL	3709	7074	6731
Social Service	Education	112	330	-178
	Experience	122	581	1318
	Performance	89	47	94
	Applications	-6	-11	-9
	Sex alone	-795	1940	1318
	TOTAL	-478	2887	2543
Technical	Education	-127	90	-418
	Experience	128	587	1323
	Performance	12	-29	18
	Applications	2	-3	-1
	Sex alone	984	3719	3097
	TOTAL	999	4364	4019

[a] Positive numbers indicate an advantage to men; Negative numbers are advantage to women.

MANAGEMENT INTERVIEWS

INTRODUCTION/PROCEDURE

This section of the report presents the results of the third major component of the present study. Although the sample of managers to be interviewed was small, there is congruence between these findings and the findings from the survey respondents. The opportunity to discuss with managers the steps they took to reach their present levels in the organization, their perceptions of the management role and of women as managers, has enriched the study as a whole.

Two interview schedules were constructed following consultation with representatives of the Human Rights Commission and the Personnel Administration Office. One, the "Short Form", was designed to obtain detailed information on the employees' previous training and job experience.

The "Long Form" repeated the questions concerning education and employment history as well as probing other areas. The additional information to be elicited included questions about the importance of a career to the employee (QUESTION L), past and present plans and ambitions for the future (QUESTION K), the role of the employee's family in relation to his or her working life (QUESTION M), and barriers that had to be overcome in order to advance (QUESTION O). In addition, both male and female respondents were asked for their perceptions concerning barriers to the advancement of women within the Alberta Public Service (QUESTION P). Women managers were asked specifically whether they had experienced any difficulties because of their sex (QUESTION Q).

The Long Form also included a section on what respondents perceived as their particular abilities and the contributions they had made to each job they held. However, this section (QUESTION N) was used solely to suggest items that might be included in the Performance Rating section of the survey.

Both the Short and the Long Forms served as guides for the interviewers and were not filled in by the respondents themselves. This allowed the interviewers the necessary freedom to restructure the sequence of questions in order to follow the natural flow of conversation. Many of the interviews were also taped to allow cross-checking of the verbal and written responses.

The sample was drawn from a computer print-out of all the management employees in the Edmonton area who occupied the positions of Senior Officer I and II and Executive Officer I and II. Initially, it was planned to draw only from the highest managerial levels. However, these levels contained so few women that the plan had to be redesigned.

There were 812 men occupying positions at the level of SO II and above, and it was therefore possible to restrict the male sample to these categories. It would have been possible, statistically, to include only males who held Executive Officer positions. However, this would have meant that the male sample was not comparable to the female sample. Therefore, SO II was selected as the lowest position for men included in the sample. A random sample of 53 men was selected to receive the Short Form and 53 to receive the Long Form of the interview.

The population to be sampled contained only 29 women at the SO II level or above. In consequence, all of them were selected to receive the in-depth interview. There were, however, 98 women at the SO I level and 21 were randomly selected for the long interview. This brought the total of women to be interviewed to 50, all of whom received the Long Form of the interview.

The interviews were conducted during the first quarter of 1978 by Decision Making Information Canada, an Edmonton based market research firm. All of the interviewers had previous experience working with managers. In general, the interviews required about two hours to complete. Interviewers reported that they received excellent co-operation and that most respondents answered questions freely and at length.

Not all individuals selected for the sample were available to be interviewed due to conflicting work responsibilities, transfers outside of the Edmonton area and vacations. The final completions represent 33 women and 37 men interviewed via the Long Form and 32 men interviewed via the Short. All details of the sample are found in TABLE 7. The Long Form of the Interview appears as APPENDIX C.

The tapes and completed interview forms were sent to the consulting firm for analysis. The forms were read and the responses coded on a number of dimensions to summarize the career history of the managers in the sample.

CAREER COMMITMENT

> "I wanted a "University" Degree and my objectives were first, towards Mining. I was influenced by supervisors who were Engineers. I was advised to go back to school to acquire a degree." (Male manager)
>
> "My idea was to enter the business world and become "successful" - autonomous, - financially rewarding." (Male manager)

QUESTION L asked respondents whether they had specific career plans at the time that they first entered the work force. The replies to this question highlight one of the traditional differences between men and women workers. Only two of the 37 men (5%) reported that they began working without a clear goal. Almost all of the men (73%) indicated that their initial

TABLE 7

Details of the Management Sample

Group	Population Size	Number Selected Long	Number Selected Short	Number Completed Long	Number Completed Short
Women					
SOI	98	21	0	11	0
SOII	29	29	0	19	0
EOI			0	3	0
EOII			0	0	0
Men					
SOI	0	0	0	0	0
SOII	812	53	53	30	26
EOI				5	4
EOII				2	2

drive was the intrinsic motive of achievement. The remainder (22%) stated they were motivated by such extrinsic factors as earning a substantial salary or achieving a high status position.

> "I figured I was going to get married and have a family. I did not consider work as permanent, demands of family come first." (Female manager)
>
> "I thought I would get married and some man would provide for me...Taught for 5 years before I really looked at a future." (Female manager)

In contrast, about half of the women (48%) reported that they had no career plans when they entered the work force. Many of them stated that they expected to marry and that they viewed work as a temporary interlude in their lives. About one-third of the women (36%) reported that they began working to fulfill achievement needs. The remaining 15% indicated extrinsic motivations: one woman stated that she had always intended to be a manager and the remaining four said that they were working primarily for a good salary (see TABLE 8, PART A).

For male managers, there was very little change over time. None of the men said that they presently had no career goals. Almost all (73%) reported they were currently working to satisfy intrinsic motivations related to achievement, and the remainder reported that their main objective was to occupy a powerful position or to earn a good salary (see TABLE 8, PART B).

TABLE 8

Part A

Initial Career Goals of Women & Men Managers

Reasons for Working	Women (n=33)	Men (n=37)
None	48%	5 %
Achievement	36	73
Influence	3	11
Money	12	11

Part B

Current Career Goals of Women & Men Managers

Reasons for Working	Women (n=33)	Men (n=37)
None	3%	0%
Achievement	51	73
Influence	39	16
Money	6	11

However, the change over time in the attitudes of the women respondents was profound. Only one woman reported that she still had no career goals. Over half are currently working to fulfill achievement needs, and the remainder said that they primarily aspire to hold a powerful position or to earn a substantial salary. These women are now similar to the men in their level of reported commitment, although the reasons they give for working are still somewhat different.

> "I became interested in upgrading, and determined to apply for positions I was becoming qualified for." (Female manager)
>
> "My outlook changed - I had initially planned only 5 years of service. However, work here is so involving and challenging, that I look forward to another 5 years ... personally involved in commitment here." (Female manager)

Two other items in QUESTION L provide a measure of the current importance of a career:

- Does your husband/wife work? If so, how would you rate the importance of your career relative to theirs?
- Would you be willing to give up or change jobs if your spouse wished it for some reason ...?

Responses to these items differed for men and women. None of the men reported that their career was less important than that of their spouse. 19% stated that the two careers were of equal importance, while 38% said that their career was more important than that of their wives (see TABLE 9, PART A). In contrast, none of the women rated their jobs as more important. Almost all of the women who were married rated their careers as equally important.

The wives of 50% of the men do not work outside of the home and roughly an equal proportion of the women managers are not married. However, the pattern for those women and men who are married and have working spouses is quite different. Men, overall tend to rate their careers more highly, while women tend to see both careers as equal in importance.

> "The importance of her career is not equal to mine. It just brings in extra money. She is only a nurse." (Male manager)
>
> "It is equally important to us that we are happy with what the other is doing." (Female manager)

In response to the second part of this question, 30% of the men and 24% of the women stated that they would not change their jobs even at their spouse's request. However, the majority of men (65%) replied that they would make a change (see TABLE 9, PART B). 39% of the women said that they would agree to a change, but all except one added that they would do so only if their husbands were willing to reciprocate,

TABLE 9

Part A

Importance of Career Relative to Spouse

	Less	Equal	More	Spouse Not Working	Not Applicable
Men (n=37)	0%	19	38	50	6
Women (n=33)	3%	47	0	3	47

Part B

Willingness to Change/Reduce Job

	Yes	No	Not Applicable
Men (n=37)	65%	30	5
Women (n=33)	39%	24	36

and if the needs of both careers were taken into account.

> "My husband is very supportive, he thinks I can handle both. If there was a position open in Ottawa for me, he would be willing to go."

The men responded to this question somewhat differently, particularly those 16 men whose wives do not work outside of the home. Male responses were not predicated on balancing potential career conflicts, but were addressed strictly to whether their job or their family is the more important. The men overwhelmingly chose family life.

> "My family plays the most important role in my life, my family comes first before a career - my background shows this." (Male manager)

The responses to both these items reveal how greatly women managers (whether married or single) value their careers. At the same time, the extent to which men would be willing to change jobs, if their family requested it, demonstrates how much they value the family. These responses contradict several prevailing stereotypes: that men are more concerned about their jobs than about their families; that women always place the family ahead of their work; and that women will give up their jobs merely because their spouses request it.

Nevertheless, women managers do demonstrate somewhat lower levels of career commitment than do men overall. This is congruent with the results of the survey. As well, it is reflective of typical female socialization which teaches females to view marriage as their primary career. In consequence, many women now in the work force began their working life with the notion that their attachment to the work force would be temporary and that they would work only "until" they married and started a family. Not surprisingly, most of the women in the management sample also initially believed that they would be leaving the work force for marriage. However, this did not happen, as it has not for countless other working women in Canada. 24% of the women had never married and a further 24% were no longer married. This is in striking contrast to the men in the interview sample, only 8% of whom were not married.

However, 52% of the women were currently married and they, too, continued to work. A few of them experienced career interruptions for maternity, but it was their absence from work which proved to be temporary, not working itself.

The fact that many of the women managers began their working lives with considerably less career commitment than men reflects the traditional personal projections for the future that young women make. This is seen in the survey responses where the difference in career commitment between women and men is greater in the younger age group. At the same time, there is also evidence that the historical attitudes of women have been changing. This shift in attitudes is documented in recent studies. Petro and Putman (1979) found that sex-role stereotypes were not as strong in their sample as in a similar sample surveyed in 1968. Berger and Gold (1979) report the same findings. Reich and LaFountaine (1976) found that women teachers expressed much higher levels of ambition than was found for teachers in a 1970 survey. The change in women's attitudes is creating a change in society and beginning, as well, to create a climate which is more accepting of the potential and suitability of women as workers. This is reflected in women's own view of themselves and in the goals they set for themselves.

MENTORING

> "I received help and encouragement to reach the bottom rung of the ladder, and there, it was made clear, was as far up as I would ever go."(Female manager)

Related to the issue of how women are viewed as employees is the process of "mentoring" or sponsorship. Respondents were asked, as part of the question on job history, if they had ever received encouragement from supervisors. 41% of the men and 21% of the women reported that they had been encouraged as they progressed through their careers. The encouragement that women received was most often directed toward increasing educational credentials. However, the encouragement that men received was almost always in the form of a direct invitation to apply for a particular position. Some of the men reported this had happened to them on numerous occasions, throughout their careers.

It has been reported that female law students encounter much difficulty in finding articling positions, while male law students often have a choice of several firms in which they might article. As well, the National Film Board reports that the more senior the position to be filled, the more likely it is that the candidate heard about it informally and was invited to apply. These senior positions are held by men. Conversely, women enter the Film Board through the formal structure and enter the organization at a much lower level (NFB, 1978).

BARRIERS TO ADVANCEMENT

Respondents were asked to describe the barriers they had encountered and overcome in order to advance in their careers (QUESTION O). Their answers were analyzed according to four broad categories: "no barriers", "barriers in self", "barriers in others" and "barriers in the situation". There were no striking differences between male and female respondents on this question (see TABLE 10), except that more females mentioned barriers in the situation. Some of the barriers that respondents mentioned included being too young in a job, having a language difficulty, personal shyness or inability to get along with co-workers, lack of experience or training, poor supervision or having supervisors who refused to delegate responsibility or to consider innovations.

In QUESTION P, respondents were asked for their perceptions of barriers that existed to the advancement of women in the Alberta Public Service. In addition, QUESTION Q, directed at women managers only, asked if they had personally encountered any discrimination on the job because of their sex. Replies were analyzed using the same categories as in the survey: Job Performance, Applications, Commitment, Encouragement and Sex Discrimination. The results are found in TABLE 11.

> "Traditional concepts are hard to overcome. Men have difficulty in putting women in charge of men." (Male manager)
>
> "There is a high probability of females leaving to play the homemaker, traditional roles ... managers are wary to hire, train, then lose them and have to retrain others." (Male manager)

TABLE 10

General Barriers Encountered During Careers

Type of Barrier	Women[a] (n=33)	Men (n=37)
None	11%	9%
In Self	41	30
In Others	32	33
In Situation	22	36

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[a] Some respondents gave more than one answer.

TABLE 11

Managers Perceptions Of Barriers To Women

Type	Women as a Group Women (n=33)	Men (n=37)	Self Women Only (n=28)
Qualifications	42%	51%	6%
Performance	0	0	0
Applications	0	0	0
Family Responsibilities	48	51	12
Commitment	52	45	0
Encouragement	21	19	0
Sex Alone	61	54	58
No Barriers	6	0	12

> "Women have little professional preparation, women have divided loyalties - family responsibilities/career, and women are less committed to a job than men are."
> (Male manager)

As can be seen from the TABLE, not only do women and men agree that women encounter considerable difficulties, but there is also very close agreement on the extent to which each factor presents a problem for women. Both women and men agree that sex discrimination is the major problem facing women in the Alberta Public Service. This is congruent with the results of the survey. Family Responsibilities, lack of Qualifications and lack of Commitment are viewed as only slightly less important by male and female managers, when talking about women in general. The importance of Qualifications has also been demonstrated in the survey.

While the first two columns of TABLE II show what factors men and women managers perceive to be barriers to the advancement of women generally, the last column indicates the barriers which the women managers themselves had encountered. Only two of the women managers reported that they had been held back by lack of qualifications. Four women (12%), acknowledged that their family responsibilities represented a barrier to them. This is not a large number and is congruent with the results of the survey which also shows that family responsibilities _per se_ are not of great significance.

QUESTION K on the interview form asked managers to describe the role their families had played in relation to their work lives. The majority of both women and men reported that their families had had a positive effect on their careers. However, it is interesting that the percentage of men reporting help from their families increased over time (67% vs. 73%), while the percentage for women decreased (80% vs. 70%). This finding likely relates to the increase in responsibilities experienced by these managers as their careers advanced. In this situation men find that their families become more supportive and women find their families become less supportive. Nevertheless, these data do not support the notion that family responsibilities constitute an overwhelming barrier to women's careers - in the perception of the women themselves. Rather, family responsibilities are made a problem in the minds of male managers who assume that women's family responsibilities will cause problems on the job.

> "Several times I was not offered a position because of my sex, or for fear that I would take time off to have a family." (Female manager)

> "I've struggled more and had to work harder to gain acceptance than men in the equivalent position." (Female manager)

> "Male managers are apprehensive about including women in management, for fear of competition, fear of upsetting the status or traditional roles." (Female manager)

Comments by women on barriers that they themselves have encountered support the primacy of sex discrimination. 19 of the 33 respondents (58%) say that they have experienced discrimination directly. The women managers report that, because of their sex, they have had difficulties in rising to the management level and, once on the job, have had further difficulty in being accepted as credible. Their major area of concern was that they would not be perceived as suitable candidates for further promotions.

This last point has special significance in relation to some of the survey findings. On the Ambition scale in the survey, it was found that Professional women, among whom almost all of the women managers are found, are no more ambitious than other women employees, when it might be expected that they would be the most optimistic about their future. Likewise, there is no lessening of discrimination within the Professional category over other categories which contain less highly qualified women. To the contrary, the effects of discrimination are least among the lowest status workers, as seen in the Social Service category. Thus it seems that, for women, there is no "room at the top". Women, no matter how well qualified or committed, never really prove themselves or escape from the burdens of their sex.

DISCUSSION AND SUMMARY

Even a cursory examination of the Alberta Public Service reveals the position of women to be vastly inferior to that of men. In 1978, men earned an average salary of $17,437 per year, while women earned $11,334. As well, only 6.5% of employees in management were female. The purpose of this study has been to examine the Public Service and determine the reasons for this inequality. This examination of women's status as employees has been placed within a larger, societal context throughout the report. Results from the three major components have been presented in the preceeding chapters and it remains the task of this segment to summarize the findings and integrate them with what is known about the position of women in society as a whole.

ORGANIZATIONAL ANALYSIS

The personnel policies of the Public Service were carefully studied in order to determine if there were formal, discriminatory mechanisms which contributed to the low position of women employees. Virtually no such mechanisms were found to exist. In fact, the neutrality of all policies is most noteworthy.

However, it is evident that neutrality has a negative impact on female employees. This occurs for several reasons.

First of all, results from the survey and management interviews suggest that discrimination continues to exist at an informal level and that neutral policies are unable to eliminate it. Second, women are socialized to place less emphasis on job preparation and advancement. Therefore, many women are not as qualified as men at the present time. Third, the passivity which women have learned and which is a residue of differential socialization, contributes both to women's lesser qualifications and their lower career aspirations. Moreover, this passivity has been thoroughly internalized, and, since it is also constantly reinforced, it is difficult to overcome alone. Thus, it can be seen that differential socialization coupled with neutrality perpetuates the status quo.

Organizations which have attempted to improve the position of women employees report that neutral policies impact negatively on women, that equal opportunity measures are also not particularly successful and that positive action is, therefore, required.

While it is true that women are ultimately responsible for the development of their careers, it is likewise true that responsible employers will attempt to assist them in realizing their full potential. Once an organization accepts the premise that neutrality perpetuates the status quo, it can begin to provide assistance.

Analysis of the remedial activities directed at improving the position of women employees suggests that there are three different types of measures available for achieving this goal. The first, passive non-discrimination, is merely the removal of formalized discriminatory mechanisms. Although essential, this first level of activity produces little change. The second, or limited measures, involves the implementation of various policies which directly benefit women. This second level of essential activities, also creates little meaningful change in women's status. At the present time, the Alberta Public Service has implemented some first and second level measures.

However, the third type, active measures, establishes the advancement of women as a major organizational goal and implements comprehensive policies to achieve targeted improvements. Active measures have the greatest potential for success. Such policies are only required until the desired result is achieved within the organization, whereas first and second level measures become permanent corporate policy.

Occupational Segregation

Occupational segregation has both a horizontal and a vertical component. In the first instance, women are concentrated in certain job categories and, in the second, women are restricted to the lower levels of any job categories that they do occupy. Both types of occupational segregation are found to exist in the Alberta Public Service and both constitute a substantial disadvantage to women.

The financial burden of occupational segregation was described in a previous section. However, loss of salary is not the only consequence. Another is that the condition of job ghettoization is of itself self-perpetuating. Inherent in the condition is a dynamic which guarantees that because it exists, it must continue to exist. The dynamic involves both the tendency of society and its systems to replicate themselves and the tendency of people to perceive themselves in the roles that society and its systems have prescribed for them.

For example, it is known that people tend to fulfill the expectations that others have for them. Sartre calls this aspect of human behaviour the "self-fulfilling prophecy". This human trait has also been demonstrated in a laboratory setting. Rosenthal conducted an experiment with school children in which he first tested all the children and then privately told the teacher that some of them (whom he identified by name) showed great potential. At the end of the term, he retested the children and found that all of those who had been named to the teacher performed better on the test and earned higher grades than the children who had not been singled out.[1] The "Rosenthal Effect" works as well in reverse. Experiments of this type demonstrate the extent to which social expectations influence behaviour.

Another factor which feeds into the dynamic of self-perpetuation is that society leads people to view different occupations as being differentially suitable for men and women. This has been shown for college students,[2] for pre-adolescents,[3] and even for young children.[4] Part of the message is communicated inadvertently by the fact that certain positions are filled by men and others by women. It has been shown that attractiveness of an occupation to boys and girls depends, in part, on the sex of the incumbents[5] and this preference continues into adulthood.

The effect of the preference on men is expressed as reluctance to select women for "men's" jobs. The effect on women is more complex. First of all, many women will be reluctant to train or apply for a non-traditional or management position because they do not perceive themselves as suitable candidates. Second, the women who do overcome their reluctance may fear that they will not be selected or promoted. Their apprehension is a realistic one and congruent with the findings from the management interviews and, to a lesser extent, the Ambition scale on the survey. As well, it has been shown experimentally that women are less likely to be hired,[6] more likely to be hired at a lower level,[7,8] and less likely to gain rapid advancement.[9] Further, women rarely find other women (role models) in non-traditional or management positions and this lack of role models not only acts as a further deterrent but also serves to reinforce their feelings of non-suitability. In consequence of all these factors, the segregated job areas are likely to remain segregated as the self-perpetuating dynamic regenerates itself.

Both the study of human behaviour and the history of institutionalism indicates that any change which has ever occurred results from high impact intervention. Such intervention must affect both the system's traditional view of itself and the people's view of their traditional role within it. In the context of the Alberta Public Service, intervention would be directed toward interrupting the self-perpetuating condition of sex-segregation in occupations.

SURVEY AND MANAGEMENT INTERVIEWS

A major focus of the present study was the exploration of a number of job-related variables which might have an impact on career development in order to determine if any of them would explain the disparities between women and men in the Public Service. Two instruments were designed for this purpose: a questionnaire administered to approximately 3,600 employees and an in-depth interview conducted with 37 male and 33 female managers. The survey sample was drawn from four broad occupational categories - Business and Clerical, Professional, Social Services and Technical - and three age groups - junior (20-30), middle (31-45) and senior (46 and over) employees. The results identify which factors are most responsible for the current state of male/female inequality within the various groups of employees.

Education

The survey findings indicate that more women graduate from high school than men and that more women graduate from community college as well. However, the men who do attend community college tend to take longer programs than do the women. Also, the programs men choose at community college lead to higher-salary jobs in the work force. However, it is at the post-secondary level where men pull substantially ahead of women and this difference in women's educational qualifications accounts for a large portion of the salary discrepancy between the sexes.

The majority of people have completed their education by the time they begin their full-time employment and the choices they have made in their studies affect their future position in the organization. The programs of study which women choose contribute to their subsequent occupational segregation because their studies are usually in the areas which have been considered suitable for women (see TABLE 12). In turn, this affects women's salaries because the occupations for which they qualify are not as well compensated as the ones chosen

TABLE 12

Bachelors and First Professional Degree Enrollment, By Program of Study, By Sex 1972-73 -- 1975-76 Canada

	1972-1973		1975-1976	
Program of Study	% Distribution	Proportion of Women	% Distribution	Proportion of Women
Education	12.9	61.2	13.3	64.4
Fine & Applied Arts	2.6	60.1	3.0	60.6
Humanities	9.3	52.7	8.2	57.3
Social Sciences	7.8	12.3	10.8	18.0
Commerce	7.8	12.3	10.8	18.0
Total Social Sciences	22.1	31.7	24.7	38.1
Agriculture & Biological Sciences	6.4	42.1	6.7	47.1
Engineering & Applied Science	7.1	2.8	7.9	5.6
Health Professions	6.1	51.0	5.5	57.3
Arts & Science General	23.9	50.7	22.1	53.8
Maths & Physics	5.6	22.2	4.8	24.9
Specialization Not Reported	4.0	41.8	3.8	50.9
Total Enrollment	100%	43.0	100%	44.7

Table from Statistics Canada - "Out of School - Into the Work Force" by men. Thus it can be seen that several factors related to Education operate to disadvantage women in terms of the salary they earn and the position they attain. All of the factors derive from female socialization: that is, socialization affects the programs of study women choose, the lesser number of years they spend in post-secondary education and the occupations for which their educational credentials qualify them.

If women intend to advance further in the Alberta Public Service, they will have to increase their educational qualifications. And if they hope to escape from the occupational segregation cycle, they will have to seek both community college diplomas and university degrees in a broader range of subject areas. 1976 figures for Canada indicate that these trends in women's education are occurring. As can be seen from TABLE 13, women's participation at all post-secondary levels has increased substantially. The number of women receiving degrees increased by 469% from 1962-63 to 1976, from 7,450 to approximately 42,374.[10] As well, TABLE 14 indicates that women are beginning to participate in greater numbers in the traditionally male faculties. For example, enrollment of women in Commerce and Business Administration had increased to 18% by 1975-76.

Nevertheless, any attempt by an organization to increase the participation of women in certain job categories will be limited by the availability of women with suitable training.

TABLE 13

Degrees Awarded by Canadian Universities, By Sex, By Level, Selected Years

	1962 - 1963		1976	
	Number	% Female	Number	% Female
Bachelor's & First Professional Degree	24,939	27.8%	83,276	46.3%
Masters	2,755	18.1	11,555	30.5
Doctorates	421	8.1	1,693	18.8
All levels*	28,115	26.5	96,524	43.9

*Does not include diplomas and certificates awarded at the undergraduate and graduate levels.

(Table from Statistics Canada, Out of School - Into the Labour Force)

TABLE 14

Selected Bachelor's and First Professional Degrees Awarded by Sex, by Discipline In Canada, 1976

Discipline	Total	%F
Education	19,604	62.1
Fine & Applied Arts	2,357	61.4
Humanities	9,685	55.7
Social Sciences Commerce	6,383	19.8*
Agriculture & Biological Sciences	5,958	45.3
Engineering & Applied Sciences	4,830	3.5**
Health Professions	5,491	53.8
Mathematics & Physical Sciences	4,018	23.1

* up from 14.1% in 1974

** up from 2.0% in 1974

Table from Statistics Canada - "Out of School - Into the Labour Force"

This factor is of utmost importance in attempting to move women into some of the professions, technical areas and trades.

Experience

The second variable which accounts for a significant portion of the disparity in the salary and position women attain is Experience. One factor which affects Experience is that women in the Public Service are younger, on average, than the men and, therefore, have accumulated fewer years in the Alberta Public Service and with other employers. However, women's younger age is only one aspect of the difference in Experience. Another aspect is career interruptions.

More women than men have experienced interruptions in their careers, and more women expect future interruptions as well. Moreover, men and women report different reasons for career interruptions, with men leaving for better positions or for study, while women leave most often for marriage and maternity. This has been reported in a study of secondary school teachers (Reich and LaFountaine, 1976)[11] and in the 1978 report on the position of women in the federal Public Service (Public Service Commission of Canada, 1978).[12]

The difference in Experience affects salary and position directly. There may also be a further effect, not probed by the survey, which occurs when women who have been at home with children return to the work force. Interrupting a career to further one's education is perceived by managers as evidence of seriousness about career development. Such seriousness is rewarded in the work place. But interrupting one's career to stay home with a family, although societally approved for women, is perceived by managers as evidence of a lack of commitment to work. Since it is difficult to translate experiences gained at home into job-related terms, women are doubly disadvantaged. They have no extra credentials to show for their absence and the fact of their absence has been interpreted as indication of a lack of seriousness about work.

Some women solve this problem by deciding not to marry or to have children, and this was reported by a few of the women managers who were in the interview sample. Other women insist on their right to be parents and (paid) workers and are absent from work only for the duration of maternity leave. These patterns are fairly typical for women, both in the Alberta Public Service and outside of it.

Although the extent to which the Alberta Public Service would wish to modify the work patterns of its female employees has not yet been determined, it can take steps to reduce the incidence of double jeopardy. Managers can be made aware of the fact that large numbers of women with children do work and will continue to work, and that the numbers of such women is increasing.

The fact that seniority, at least in theory, is less important to advancement than education means that the disadvantage of having an interrupted work history is somewhat modified. It is important for women that abilities, as opposed to seniority, be even further emphasized. One of the findings of the survey was that part-time work, no matter how extensive or skilled, did not contribute to advancement. Part-time work experience, which is more common to women than to men, should be evaluated with reference both to seniority and to the skills that were developed and should also be allowed to contribute to advancement.

Job Performance

Three measures were used to examine the variable of Job Performance and its relationship to salary. First, respondents were asked to rate their own performance and then to compare it to the rating they received from their supervisor at the last Performance Appraisal. How employees rated themselves did not relate to salary and so the item was dropped from the analysis. The supervisor's rating did relate to salary and was retained. Analysis of this item revealed no differences in performance between women and men.

A further set of items asked respondents to describe the areas in which they believed themselves to be competent. Since this question did not relate to salary, it too was dropped from the analysis. However, the item was interesting from the perspective of self-perception. It was stated earlier that people perceive themselves in the way that society has taught them and according to the values that society deems appropriate for each sex. Male respondents rated themselves "high" on such male-appropriate characteristics as having technical expertise and being responsible, decisive, analytical and logical. Women believed themselves to be highly motivated, energetic and productive. These replies seem to reflect the stereotypes that people have of themselves rather than any real differences between one group and another.

However, the characteristics which men chose for themselves are the ones which society believes to be necessary for advancement, while the characteristics chosen by women relate more to good performance in one's present position.

It was noted earlier that the Appraisal forms in use in the Public Service may have a differential impact on women's and men's career growth. It was hypothesized that, because of differences in the forms, women may be over-encouraged to remain in their present jobs, while men may be directed toward future advancement. In a prior study (Reich and LaFountaine, 1976)[13] it was found that women teachers received extra recognition for their performance in the classroom, while men were encouraged to develop administrative skills. Performance with students was not the basis upon which men were judged to be suitable potential administrators. However, the extra recognition which women received for classroom work is congruent with the pattern of self-perception found in the present study. Such recognition encourages present rather than future orientation in women.

Family Responsibilities/Career Commitment

These two variables and their effect on salary are treated together because they are generally perceived to be related. Contrary to expectations, the survey findings indicate that these variables do not account for much of the difference in salary between women and men. Women report more Time spent on household tasks and this is associated with a small reduction in salary. However, male respondents reported that they experience more Interference from their families than do women. This is likely due to the fact that more of the men have families and that they hold more demanding positions as well.

Statistical analysis shows that there is actually a positive association between Interference scores and salary: that is, the greater the reported Interference from family, the higher the employee's salary. However, it does not seem reasonable to interpret this as indicating that advancement results from Interference. Rather, it can only be the other way around, that advancement entails greater responsibilities which are then more difficult to fulfill given the demands of family life. Thus, it can be seen that the relationship between family responsibilities and advancement is not a simple one and does not follow the expected pattern.

However, the psychological impact of Responsibilities is important. It has been noted that Time spent on household tasks and with children is, to some extent, under individual control. Even young, unmarried women appear to spend considerable time on household tasks. Among those women who are married and have children, some may believe that children need a full-time mother, some may prefer part-time work and others may bebieve that the quality of time spent with children is of greater significance than the quantity. Each of these opinions has a quite different impact on career development.

Family responsibilities are filtered through the individual's perception of his or her role. Generally speaking, women working for the Alberta Public Service have managed to integrate both of these aspects of their lives. Some women within the Public Service who have achieved this integration may well have done so by limiting their career ambitions. It is just as likely however, that the organization has assumed that women will experience home/work conflict and has failed to promote them to demanding positions because of this assumption.

Of course, it must also be kept in mind that Time and Interference are self-report data and, therefore, open to bias. Nevertheless, the data suggest that both society in general and managers within the Public Service have overestimated the extent to which women are limited by their family responsibilities from fully participating in the work force.

There is evidence for this in the management interviews and from the comments female respondents wrote on the back of their questionnaires. Although women respondents indicated that their home and work responsibilities were well integrated, they were concerned that their managers would assume that interference from their families was greater than the women knew it to be. Since 51% of the male managers in the interview sample believed that Family Responsibilities held women back, but only 21% of the women indicated that they had experienced interference from their families in their work lives, it appears that the concern women expressed is justified.

Analysis of Commitment also revealed little difference between women and men. On some factors, differences among the four occupational categories were considerably larger than differences between women and men within a category. These latter differences tended to disappear when age and other background characteristics were taken into account. Nevertheless, men did exceed women to some extent in their rating of the subjective Importance of a career, of Ambition and of their willingness to undertake various activities in order to further their career.

In this regard, it should be noted that the survey can only measure the attitudes and record the behaviour which people report at a particular moment in time. The past cannot be recorded except to the extent that its effects may still be felt in the present. It is likely that the extent of Responsibilities and degree of Commitment which women report now would have been quite different some years ago. Evidence from the interviews shows that many women began to work with very little initial commitment but that their attitudes have altered radically over the years. The impact of these new attitudes is profound, both on the women employees themselves and the organizations in which they are employed. As discussed in the Survey section, other researchers have also documented the rapid change taking place in women's attitudes toward work.

Mentoring

Mentoring refers to the extent of encouragement that employees receive to undertake further education or training and to apply for promotion. Mentoring activity is closely related to Performance since superior performance tends to lead to the encouragement of employees to advance in their careers. Analysis of the Mentoring items reveals few differences between women and men once background characteristics are taken into account. The differences which occur do tend to favour men, but do not appear to be related directly to salary. However, the absence of an effect on salary may also indicate that the survey measure was too general to identify it. Results from the management interviews indicate that this may be the case.

Managers in the interview sample reported that they had received encouragement on numerous occasions. Both women and men were urged to acquire further education but the men, much more frequently than the women, also received encouragement to apply for promotion. Most important, many of the male managers stated that they had been invited more than once to fill specific positions. This is not an uncommon experience for men, although it is for women and is congruent with the findings of Larwood and Blackmore (1978)[14] who reported that men prefer to choose other men for leadership positions.

Applications

The survey findings also show that women are very successful when they apply for lateral transfer but that they do not apply for promotion as often as men. Although women's younger age may account for some of this, it may also be another manifestation of their present rather than future orientation. As such, women's lesser tendency to apply for promotion may contribute further to maintenance of the status quo.

However, when women do apply for promotion, their success rate is 75% vs. 47% for men. Analysis of the role of Applications in accounting for advancement reveals that rate of application does not seem to have a direct effect on salary. In spite of the fact that women are successful applicants for promotion and their salary is not adversely affected by their less frequent rate of application, they have not progressed very far in the hierarchy.

A number of explanations can be offered to clarify this seeming incongruity. It is possible that men enter the organization through informal systems, that they enter at higher levels and that when men are promoted, it is through more than one job level. Since the survey did not collect information on the job level at which employees entered, it may prove helpful to look at how this process functions in another organization. The National Film Board reports that about 40% of male employees obtained their first position through personal contacts while the majority of women employees obtained their first Film Board job through such formal structures as newspaper advertising, Manpower or the Personnel Department. As well, almost 70% of women entered at the lowest levels as compared to only

27% of the men.[15]

Not only does entry at a higher level immediately improve the position of men, but it may also help to explain why women's success in gaining promotion has not improved their position in the organization to a greater extent. Entering at a lower level guarantees that women will have to move through several more levels before they even reach the point from which the men started. In this way, the distance between women's and men's occupational levels is maintained, even though the women have obtained some upward mobility.

MECHANISMS OF DISCRIMINATION

Thus, it can be seen that of the many variables which were analyzed, only a few were useful in accounting for salary differentials. These variables are Education, Experience and Time on household tasks for all groups, and Activities (for the Business and Clerical group only). Of these four, only Education and Experience have a major impact on women's salaries. However, when the differences due to each variable are calculated, a significant difference in salary still remains which, at the present time, can only be associated with the sex of the employee. This difference is larger than the difference due to Education and Experience combined.

It will be remembered that the average salary discrepancy between women and men was approximately $5,700 and that of this amount, $3,097 was associated with the sex of the employee. It is important to note that, among junior employees in Social Services occupations, men also have lower salaries than would be expected on the basis of their education and experience. Social Service occupations are primarily involved with providing direct care and may be viewed as an extension of the female, nuturing role. It thus appears that men are disadvantaged when they depart from traditionally male career roles. However, this must not be overemphasized, since the disadvantage was small and overcome in the middle and senior Social Service groups.

Since the sample included only sex-integrated occupations and the questionnaire assessed a comprehensive array of variables related to advancement, the most likely explanation of the $3,097 portion of the $5,700 differential is that it occurs because of discrimination against women on the basis of sex.

It is possible that some of the difference is due to subtle occupational segregation within the job categories sampled, or to other factors as yet unknown either to the authors of this report or to other researchers in this field. This possibility can only be explored through additional research. Moreover

Gunderson has stated that all studies which have investigated the status of women, have found substantial differences remaining due to sex, even after differences in qualifications were taken into account.

Referring strictly to the data at hand, the results suggest that discrimination at the informal level is a potent barrier to women employees of the Alberta Public Service. This interpretation is congruent with the results of other studies. The classic study in this area showed that both women and men evaluated a research article thought to be written by a woman as less worthy than the identical piece ascribed to a man.[16] A related experiment was undertaken using identical works of art. Still another study, attempting to discover how people explained success in men and women, found that women's success was attributed to luck while men's success was thought to be due to individual talent.[17] As well, Reich and LaFountaine (1976)[18] found that both women and men teachers believed that women were competent in their current jobs (present-orientation) but not as suited for promotion to management (future-orientation).

Attitudes Toward Women

The existence of negative attitudes toward women employees, as documented by the survey, is further evidence of the existence of informal discriminatory mechanisms. Results of the analysis on the various items in the Attitudes measure indicate that Public Service employees hold somewhat negative attitudes toward women in the organization. The attitude of women toward other women is more favourable than the attitudes of men, although women are still evaluated less favourably than men. Although both men and women expressed more favourable opinions on the "opportunity" areas of the question (suitability of women to hold responsible positions, to compete for top jobs and to receive equal pay), respondents were not as convinced that women had the requisite skills to be successful managers.

Interestingly, the characteristics which women are said to lack (ambition, technical expertise, being logical, rational and analytical) are the characteristics which men ascribed to themselves on one of the earlier measures on the survey. As stated earlier, the characteristics which women chose for themselves on the same measure, related better to success in their current positions than to advancement.

The least favourable score on the Attitudes measure in the present study concerned the provision of active encouragement to recruit women into management and non-traditional positions.

It should be noted that while the attitudes as measured tended to be somewhat negative, they were not extremely so. In fact, the survey measure reveals that attitudes are not as heavily negative as the extent of the inequality which exists might lead one to predict.

Therefore, the results of the attitudinal measure raise the question of incongruity between the findings and the extent of discrimination already established. The answer to this question lies in accepting the fact that the capacity of attitudinal measurement is probably limited to the discovery of superficial attitudes. It is likely that current measures do not probe deep-seated, behaviour-generating attitudes. Therefore, the measurement of attitudes must always be supplemented by a detailed study of actual behaviour.

Additional evidence that negative attitudes toward women exist at a profound level is found in the management interviews. 58% of the women managers who were interviewed reported that sex discrimination was a barrier to their progress in the Alberta Public Service. Moreover, 54% of the male managers agreed. Thus, it is possible that the survey merely tapped a level of attitudes that is easily affected by today's more liberal social climate, while the interviews uncovered evidence of the behaviour-generating attitudes which still severely limit women's opportunities. The presence of attitudes which restrict behaviour may be seen in women as barriers they impose on themsevles and, in men, as barriers they impose on women.

In addition to preventing the full utilization of women currently seeking advancement, the presence of discrimination contributes to the cycle of system-replication. Katz and Kahn (1966)[19] discuss the importance of "role-sending" in organizations. This is a process by which organizations communicate to employees the types of behaviour they are expected to exhibit. Men receive feed-back which is conducive to advancement, while women receive feed-back which encourages them to remain in their present positions. Katz and Kahn's formulations may help to explain the failure of many women to behave in ways which would facilitate their advancement and the failure of many men to send them signals which would elicit this behaviour.

As well, the presence of discrimination within the Public Service may lead women to conclude that attempts to improve their position is futile. If they act on this assumption, they may decide not to acquire the education and experience they need in order to advance or move into non-traditional areas. Women's lack of requisite qualifications will constitute yet a further barrier to them and will also reinforce the familiar stereotypes about them in the work force.

Moreover, the fact that even well-qualified women do not advance in proportion to their abilities, has a negative affect on other women who are at the beginning of their careers and is likely responsible for the fact that they may obtain lower levels of qualifications.

Thus, a destructive cycle is set in motion, in which failure to qualify and failure to advance affect one another reciprocally. This ensures the regeneration of the self-perpetuation cycle and ensures, as well, that the future will closely resemble the present.

However, the cycle can be interrupted. Interventions capable of creating meaningful change in the positions of women in the Alberta Public Service are suggested next.

FOOTNOTES/DISCUSSION/SUMMARY

1. J. Farley, Affirmative Action and the Woman Worker. New York, AMACON, 1979.

2. F.G. Epstein and A.L. Bronzaft, "Female Modesty in Aspiration Level". Journal of Counselling Psychology, Vol. 21, No. 1.

3. N.K. Schlossberg and J. Goodman, "A Woman's Place: children's sex role stereotyping of occupations". Vocational Guidance Quarterly, 1972, Vol. 20, No. 4.

4. W.R. Looft, "Vocational Aspirations of Second Grade Girls". Psychological Reports, 1971, Vol. 28.

5. M. Plots and M.J. Rosen, "Effect of Sex on Career Models on Occupational Preferences of Adolescents". AudioVisual Communication Review, 1974, Vol. 22, No. 1.

6. L.S. Fidell, "Empirical Verification of Sex Discrimination in Hiring Practices in Psychology". American Psychologist, 1970, Vol. 25.

7. Ibid.

8. J.R. Terborg, "Women in Management: A Review". Journal of Applied Psychology. 1977, Vol. 62, No. 6.

9. B. Rosen and T.H. Jerdee, "Perceived Sex Differences in Managerially Relevant Characterisitcs". Sex Roles, 1978, Vol. 4, No. 6.

10. Statistics Canada, Out of School - Into the Labour Force: Trends and Prospects for Enrollment, School Leavers and the Labour Force in Canada - the 1960's through the 1980's. Catalogue No. 81-570E, Occasional, August, 1978.

11. C. Reich and H. LaFountaine, The Effect of Sexism on the Career Development of Teachers. Toronto, USSTF, 1976.

12. Canada Public Service Commission. Women in the Canadian Public Service; Volume 1. Ottawa, Public Service Commission, 1978.

13. Op. cit.

14. L. Larwood and J. Blackmore, "Sex Discrimination in Managerial Selection: Testing Predictions of the Vertical Dyad Linkage Model". Sex Roles, Vol. 44, No. 3, 1978.

15. C. Brassard and T. Nash, Women at the National Film Board: An Equal Opportunity Study. Ottawa, The National Film Board, 1978.

16. P. Goldberg, "Are Women Prejudiced Against Women"? TRANS-ACTION, 1968, Vol. 5, No. 5.

17. K. Deaux, The Behavior of Women and Men. Belmont, California, Wadsworth, 1976.

18. Op. cit.

19. D. Katz and R.L. Kahn, Social Psychology of Organizations. New York, Wiley, 1966.

RECOMMENDATIONS

Three types of remedial measures have been outlined, each representing an attempt to improve the position of women in the work force. A combination of the first two (passive non-discrimination and limited measures) is typically referred to as an Equal Opportunity Program.

The third, active measures, is usually called Affirmative Action and is comprised of a comprehensive set of equal opportunity measures plus additional, special measures. Differences among the three types result from differences in the extent of activities undertaken and the underlying principles upon which they are based. A policy of passive non-discrimination is based on the assumption that the simple removal of restrictions will facilitate equality. A program of limited measures assumes that once equal opportunity policy is firmly established, women will attain equality because they are assured access to all of the formal organizational structures. Affirmative Action, however, while believing in the inherent equality of all people, recognizes that many people in a society (for example, women and minorities) are not equal in their ability to take advantage of available opportunities. This occurs because the effects that differential socialization and past discrimination have had on women has caused many of them to internalize a self-concept and a set of accompanying behaviours which restricts their mobility within the organization.

Thus, the goal of Affirmative Action is to provide remedies which are designed to compensate for and overcome the negative effects of the past. Hence, Affirmative Action Programs are temporary programs and need to be maintained only until actual equality (as defined above) is achieved. Equal Opportunity provisions, however, will need to remain as permanent corporate policy.

While the goal of Affirmative Action is to improve the participation rate of women in management and non-traditional areas, it must also be recognized that not all women seek advancement or change in occupational areas. Equally important are policies which will recognize the value of the jobs in which many women prefer to be employed and will continue to be employed for the foreseeable future.

The recommendations which follow take this point of view into account. As well, they are based on the results of both the survey and interview components of this study and on a careful examination of Public Service policies and procedures. Each recommendation is directed toward the achievement of one aspect of the overall goal: the equitable representation and full utilization of women at all levels and in all categories as well as full recognition of their contribution to the work of the Public Service. The recommendations are concerned with three main areas: creation of an Affirmative Action Program and application of it to staffing procedures and compensation. The recommendations are broad, since the specifics of each aspect are beyond the mandate of this study.

CREATION OF AN AFFIRMATIVE PROGRAM

At the present time, several governments in Canada have policy directives for implementing Affirmative Action Programs, but the Alberta Government has legislation which make Affirmative Action illegal. The recently created Canadian Human Rights Bill contains legislation which permits the creation of Affirmative Action Programs on behalf of target groups such as women and minorities. American Affirmative Action practices have also been examined in the formulation of the following Recommendations.

Recommendation 1

It is recommended that the Individual Rights Protection Act be changed so that private corporations, the Alberta Public Service and Crown Corporations are required to provide Affirmative Action Programs for women.

Recommendation 2

It is recommended that the Alberta Government require "contract compliance" from corporations with which the Government conducts business (suppliers, contractors, etc.) so that government suppliers and contractors will establish and implement Affirmative Action Programs if they wish to do business with the Government.

Recommendation 3

It is recommended that an Office of Equal Opportunity be created to oversee the creation of Private sector Affirmative Action Programs, to ensure compliance and to monitor implementation.

Recommendation 4

It is recommended that an Office of Equal Opportunity be created within the Alberta Public Service to oversee the creation of Departmental Affirmative Action Programs, to ensure compliance and to carry out on-going monitoring.

Recommendation 5

It is recommended that the over-all responsibility for the Program be assigned to the Deputy Minister (or his or her equivalent) in each Department and Crown Agency.

Recommendation 6

It is recommended that the on-going implementation of Affirmative Action be assigned to an individual in each Department and Agency, and that this person have sufficient rank and operating budget so that the Program has credibility with all employees.

Recommendation 7

It is recommended that all managers be held accountable for implementation of the Affirmative Action Program in the same way that they are accountable for Departmental goals and objectives and that their performance in this area be included in their overall performance rating.

Recommendation 8

> It is recommended that both short and long term objectives be set for implementation of the Affirmative Action Program and that the objectives be achievable, measurable and realistic with respect to the qualifications and aspirations of employees and the staffing needs of the Alberta Public Service.

COMPENSATION

The study has demonstrated that there are two primary reasons for the salary differential between women and men in the Public Service, once Education and Experience are accounted for. First, the occupations in which women are employed are not as well compensated as men's occupations and, second, equally qualified women employed in equivalent positions in the sex-integrated categories are not equally compensated and do not advance as rapidly as men.

Recommendation 9

> It is recommended that a policy of equal pay for work of equal value be implemented to ensure that, although women often perform different work than men, they will receive the compensation to which their work actually entitles them.

To ensure that women's salaries are adjusted so that salaries reflect the new policy of equal value compensation will involve massive revision of the classification criteria currently in use in the Public Service. This is necessary because current systems of job evaluation tend to downgrade the occupations in which most women are employed.

Recommendation 10

> It is recommended that the classification criteria be reviewed and revised to ensure that the work which women typically perform is properly evaluated and adequately compensated.

The fact that equally qualified women within the same job streams as men are not paid equally raises an issue which the study was not structured to examine in detail: how individuals are assigned to classification levels. It is possible that women require a higher level of qualifications than men before they are hired to a particular position or promoted. It is also possible that women are assigned to lower pay levels than men within the salary range of the position into which they have been hired or promoted.

Recommendation 11

> It is recommended that the classification levels of women and men be reviewed and where there are discrepancies between women and men which cannot be justified on the grounds of qualifications or responsibilities, that these anomalies be corrected.

STAFFING PROCEDURES

The goal of reviewing and revising staffing procedures is to ensure that women are represented in all occupations and at all levels of the Public Service. Such revision is essential because of the extent of occupational segregation (both by level and category) within the Alberta Public Service.

It has been shown that utilizing internal recruitment is an effective method for increasing women's participation in the areas (management and non-traditional jobs) in which they are under-represented.

Recommendation 12

> It is recommended that the degree of reliance on internal recruitment be increased.

Recommendation 13

> It is recommended that Departmental utilization studies be conducted so that women with qualifications, with interest and with the potential to become qualified will be identified and actively encouraged to fill management positions and positions in non-traditional areas.
>
> It is further recommended that women so identified be involved in career planning and pathing, so that a record is maintained of their progress in the organization.

Recommendation 14

> It is recommended that women be actively recruited for the job categories in which they are under-represented and that men be actively recruited for the job categories in which they are under-represented so that occupational segregation in the Public Service is eliminated.

The usual reason for using Job Bulletins is to increase the applicant flow from in-service candidates. The Bulletins could also be used to achieve the further goal of increasing the frequency of applications from women candidates.

Recommendation 15

> It is recommended that all Job Bulletins and all external job advertising include language which specifically invites applications from both women and men.

It is also necessary to review all position specifications and pre-screening criteria to ensure that women are not disadvantaged either by the inclusion of unnecessary criteria or the exclusion of job-related experiences peculiar to women.

Recommendation 16

> It is recommended that all position specifications be reviewed to determine if any qualifications are inflated. If this is found to occur, the specifications should be revised to ensure that only those qualifications are retained which are strictly necessary for adequate performance on the job.

Recommendation 17

> It is recommended that all pre-screening criteria be carefully examined to ensure that none of them have a negative impact on women candidates.

Recommendation 18

> It is recommended that the part-time work experience of candidates be included in calculating seniority and level of skill so that part-time work experience will be counted in the advancement process.

The goal of interviewing applicants before a selection panel is to increase objectivity in the selection process. However, women managers in the interview sample and women respondents to the survey (who wrote comments on the questionnaire) indicated that they were often asked illegal questions in the job interview.

Recommendation 19

> It is recommended that the Public Service implement firm policy to ensure that only job-related questions be asked of candidates in the job interview so that all questions concerning marital status, pregnancy, child care arrangements, etc. will be eliminated.

Recommendation 20

> It is recommended that a representative from Personnel monitor all competitions to ensure that women candidates are asked fair questions and receive fair treatment.

Recommendation 21

> It is recommended that women be included on all selection panels.

Recommendation 22

It is recommended that all staff who are likely to sit on selection panels receive training concerning the fair questioning and treatment of women candidates.

Recommendation 23

It is recommended that any criteria for judging a candidate which relates to comportment, personality or appearance be eliminated and that candidates be judged solely on their ability to do the job for which they are applying.

Recommendation 24

It is recommended that one comprehensive appraisal form be utilized in the evaluation of all Public Service employees.

Recommendation 25

It is recommended that the criteria for rating performance be strictly confined to job skills.

The survey has demonstrated the primacy of education as a path to advancement in the Alberta Public Service and that women are behind in acquiring educational credentials. Therefore, acquiring the necessary credentials is of utmost importance for women employees.

Recommendation 26

It is recommended that the Public Service encourage women employees to acquire educational credentials and to assist them financially in doing so.

Recommendation 27

It is recommended that, in addition to serving overall staffing needs, the educational programs of the Public Service be directed toward improving the position of women employees. This includes giving women priority in access both to in-house and external programs, to educational leave and to financial assistance.

Although the survey measured the extent to which employees had access to training opportunities in the Alberta Public Service, it was not designed to differentiate between the types of training activities available to male and female employees. However, in many organizations it has been found that opportunity for "development" is restricted to employees above a certain level, while employees below that level only receive "training" or assistance in improving performance in their present jobs. Thus, it can be seen that men more often benefit from developmental activities (future orientation) and that women more often receive training (present orientation).

Recommendation 28

It is recommended that a training analysis be conducted to determine if women have equal access to development and to ensure that they be given equal access if this does not presently occur.

Recommendation 29

> It is recommended that career counselling services be provided to all employees so that they may be assisted in planning their careers within the Public Service.

Recommendation 30

> It is recommended that all supervisors and managers receive specific training, to provide them with the skills needed to counsel women in determining their career goals and to further assist in the achievement of those goals.

Although the effects of "Career Development" workshops have not yet been assessed, many organizations which hold them regularly report that they are pleased with the results. At the very least, such workshops provide women with an opportunity to assess their degree of career commitment and to revise their career plans, if this should be necessary.

Recommendation 31

> It is recommended that Career Development workshops be offered to all interested women in the Public Service.

Attitudinal awareness training is another common component of Affirmative Action Programs. The survey reveals the existence of some negative attitudes toward women but the full extent of discrimination experienced by women is best demonstrated in the amount of the salary differential which is associated with sex. Thus, while superficial attitudes may not appear to be severely negative, deep-seated, behaviour-generating attitudes continue to affect adversely the position of women employees.

Recommendation 32

> It is recommended that attitudinal workshops be held for managers at all levels of the Public Service so that they may have an opportunity to articulate and resolve their concerns regarding the role of women in the Alberta Public Service.

BIBLIOGRAPHY

Armstrong, P. and H. *The Double Ghetto*. Toronto, McLelland and Stewart, 1978.

Berger, C. and Gold, D. "Do Sex Differences in Problem Solving Still Exist?" *Personality and Social Psychology Bulletin*, 1979, Vol. 5, No. 1.

Boyd, M. and Eichler, M. and Hofley, J. "Family: Functions, Formation and Fertility". in Cook, G. ed., *Opportunity for Choice*. Ottawa, Information Canada, 1976.

Brassard C. and Nash, T. *Women at the National Film Board: An Equal Opportunity Study*. Ottawa, National Film Board, 1978.

Broverman, I.K. et. al. "Sex Role Stereotypes and Clinical Judgements of Mental Health". *Journal of Counselling Psychology*. 1970, Vol. 3, No. 4.

Canada Public Service Commission. *Women in the Canadian Public Service, Volume 1*. Ottawa, Public Service Commission, 1978.

Canadian Advisory Council on the Status of Women. *Women in the Public Service: Barriers to Equal Opportunity*. January, 1979.

Deaux, K. *The Behavior of Women and Men*. Belmont, California,

Epstein, F.G. and A.L. "Female Modesty in Aspiration Level". *Journal of Counselling Psychology*, Vol. 21, No. 1

Farley, J. *Affirmative Action and the Women Worker*. AMACON, New York, 1979.

Fidell, L.S. "Empirical Verification of Sex Discrimination in Hiring Practices in Psychology". *American Psychologist*, 1970, Vol. 15.

Goldberg, P. "Are Women Prejudiced Against Women?" *TRANSACTION*, Vol. 5, No. 5, April 1968.

Gunderson, M. "Work Patterns". in Cook, G. ed. *Opportunities For Choice*. Ottawa, Information Canada, 1976.

Hirsch, F. *The Social Limits to Growth*. Cambridge, Mass., Harvard Paperbacks, 1978.

Katz, D. and Kahn, R.L. *Social Psychology of Organizations*. New York, Wiley, 1966.

Larwood, L. and Blackmore, J. "Sex Discrimination in Managerial Selection: Testing Predictions of the Vertical Dyad Linkage Model". Sex Roles, Vol. 44, No. 3, 1978.

Leavitt, R.R. "Women in Other Cultures". in Gornick, V. and Moran, B.K., ed., Women in Sexist Society. New York, Mentor, 1971.

Looft, W.R. "Vocational Aspirations of Second Grade Girls". Psychology Reports, 1971, Vol. 28

"Men Still Ahead U.S. Survey Says". Globe and Mail, November 21, 1978.

Meissner, M. and Humphreys, W.E. and Schou, W.J. "No Exit for Wives: Sexual Division of Labour". The Canadian Review of Sociology and Anthropology, 1975, Vol. 12, No. 4.

Ontario Ministry of Labour. The Status of Women Crown Employees 1977-78 Report. Queen's Park, Women Crown Employees Office, November 1978.

Ostry, S. "The Female Worker in Canada". Ottawa, Information Canada, 1968.

Peters, L.H. et. al. Women as Managers Scale (WAMS): A Measure of Attitudes Toward Women in Management Positions. American Psychological Association Document #855, Washington, D.C. n.d. Abstracted in JSAS Catalogue of Selected Documents in Psychology, 1974, Vol. 4, No. 27.

Petro, C.S. and Putnam, B. "Sex Role Stereotypes: Issues of Attitudinal Change". Sex Roles, 1979, Vol. 5. No. 1.

Plots, M. and Rosen, M.J. "Effect of Sex on Career Models on Occupational Preferences of Adolescents". AudioVisual Communication Review, 1974, Vol. 22, No. 1.

Reich, C. and LaFountaine, H. The Effect of Sexism on the Career Development of Teachers. Toronto, OSSTF, 1976.

Rosen, B. and Jerdee, T.H. "Sex Stereotyping in the Executive Suite". Harvard Business Review, 1974, Vol. 52, No. 2

Rosen, B. and Jerdee, T.H. Perceived Sex Differences in Managerially Relevant Characteristics". Sex Roles, 1978, Vol. 4, No. 6.

Schein, V.E. "The Relationship Between Sex Role Stereotypes and Requisite Management Characteristics". Journal of Applied Psychology, 1973, Vol. 5, No. 7.

Scholssberg, N.S. and Goodman, J. "A Woman's Place: Children's Sex Stereotyping of Occupations". Vocational Guidance Quarterly, 1972, Vol. 20, No. 4.

Schrank, H.T. and Riley, J.W. "Women in Work Organizations" in Kreps, J.M., ed., Women and the American Economy, Englewood, Cliffs, N.J., Prentice-Hall, 1976.

Spence, J. and Helmreich, R. The Attitudes Toward Women Scale: An Objective Instrument to Measure Attitudes Toward the Rights and Roles of Women in Contemporary Society. American Psychological Association Document #153, Washington, D.C. n.d. Abstracted in JSAS Catalogue of Selected Documents on Psychology, 1972, Vol. 2, No. 66.

Terborg, J.R. "Women in Management: A Research Review", Journal of Applied Psychology, 1977, Vol. 62, No. 6.

United States Equal Employment Opportunity Commission, Voluntary Affirmative Action. Washington, D.C. EEOC, 1978.

Wilson, V.S. and Mullins, W.A. Representative Bureaucracy: Linguistic/Ethnic Aspects in Canadian Public Policy". Canadian Public Administrator, Winter, 1978-79.

APPENDIX A

The Survey

June, 1978

Dear Employee:

The Alberta Human Rights Commission has commissioned a study of the Alberta Public Service. The purpose of the study is to investigate the career experiences of men and women, and to identify the barriers which exist to the advancement of women. The Commission has contracted with Women Associates Consulting, Inc. to carry out the research. The study is being conducted with the cooperation of the Personnel Administration Office and the Alberta Union of Public Employees.

As part of the study, a questionnaire is being sent to a random sample of male and female employees, requesting information on their job history and preparation, and their attitudes toward employment. You are among the employees selected. We trust that you will take the time to answer the questionnaire and that you will do so as carefully and as honestly as you can. A stamped, self-addressed envelope is enclosed so that you can mail your reply directly to us.

This procedure has been designed to protect the confidentiality of your responses. No one within the Public Service is aware of who is in the sample, and the data will be analyzed for the group as a whole. At no time will you be identified as having participated in the study, nor will your individual answers appear in the report.

The questionnaire you have been sent has an identification number. This is simply so that the consulting firm can send a reminder to employees who fail to respond. Once all questionnaires have been received, the master list will be destroyed, and no one will be able to determine who was in the sample.

The sample has been carefully constructed to represent the opinions of a wide segment of the Public Service, and your reply is important. The results will be used to develop a comprehensive picture of the experiences of employees in the Public Service, and we hope that you will be included. If you have any questions about the survey, please contact Dr. Dorothy Richardson, Assistant Director, Alberta Human Rights Commission (427-7661).

Sincerely yours,

Carol Reich

Carol Reich, Ph.D.
Women Associates

PLEASE RESPOND TO THE FOLLOWING QUESTIONS BY CIRCLING THE NUMBER WHICH BEST DESCRIBES YOUR ANSWER. 1 8

A. Sex: 1. Male 2. Female 9

B. Age:

1.	20 or younger	4.	31 to 35	7	46 to 50	
2.	21 to 25	5.	36 to 40	8	51 to 55	10
3.	26 to 30	6.	41 to 45	9	56 or older	

C. Marital Status:
1. Single
2. Married (including common-law) 11
3. Widowed, Separated, Divorced.

D. How many children do you have in each of the following age ranges? 12 15

0 to 4 years	0	1	2	3+
5 to 9 years	0	1	2	3+
10 to 14 years	0	1	2	3+
15 years and older	0	1	2	3+

E. What is your salary (before deductions)? 16 17

01.	$ 7,000 or less	14.	$19,001 to 20,000
02.	$ 7,001 to 8,000	15.	$20,001 to 21,000
03.	$ 8,001 to 9,000	16.	$21,001 to 22,000
04.	$ 9,001 to 10,000	17.	$22,001 to 23,000
05.	$10,001 to 11,000	18.	$23,001 to 24,000
06.	$11,001 to 12,000	19.	$24,001 to 25,000
07.	$12,001 to 13,000	20.	$25,001 to 26,000
08.	$13,001 to 14,000	21.	$26,001 to 27,000
09.	$14,001 to 15,000	22.	$27,001 to 28,000
10.	$15,001 to 16,000	23.	$28,001 to 29,000
11.	$16,001 to 17,000	24.	$29,001 to 30,000
12.	$17,001 to 18,000	25.	$30,001 or greater
13.	$18,001 to 19,000		

F. a. **Do you supervise any other workers?** 1. Yes 2. No 18

b. **If "Yes," how many?** 1 2 3 4 5 6+

c. **Do any of these workers, in turn, supervise others?** 1. Yes 2. No 20

G. To which bargaining division or occupational group do you belong? 21 22

01. Admin. Support Services	08. Educational Services
02. Admin. & Program Services	09. Health & Therapy Support
03. Correctional & Reg. Services	10. Medical & Rehab. Services
04. Trades & Related Services	11. General & Field Support
05. Nat. Res. Conserv. Services	12. Technical Services
06. Social Services	13. Opted-Out & Excluded
07. Institutional & Patient Support	

H. In which department do you work?

01. Advanced Education & Manpower
02. Agriculture
03. A.H.I.C.
04. Attorney General
05. Auditor
06. Business Development & Tourism
07. Consumer & Corporate Affairs
08. Cultural Affairs
09. Education
10. Energy & Natural Resources
11. Environment
12. Executive Council
13. Federal & Intergov. Affairs
14. Government Services
15. Hospital & Medical Care
16. Housing & Public Works
17. Labour
18. Legislative Assembly
19. Municipal Affairs
20. N.A.I.T.
21. Ombudsman
22. Personnel Administration Office
23. Provincial Audit 23 - 24
24. Recreation, Parks & Wildlife
25. S.A.I.T.
26. Social Services & Community Health
27. Solicitor General
28. Transportation
29. Treasury
30. Treasury Branches
31. Other ________________

I. a. How far did you go in public school?

1. Grade 9 or less
2. Grade 10
3. Grade 11 25
4. Grades 12 or 13

b. Did you graduate? 1. Yes 2. No 26

J. Have you ever received any other formal education or training? Include programs in which you are currently enrolled, as well as courses you have taken which were offered by an employer.

1. Yes 2. No ⟶ GO TO QUESTION O 27

If "Yes," we would like a complete record of the education or training you have received. Questions K through M refer to degree and certification programs. Question N asks about other training experiences that were not part of a formal program.

K. DEGREE AND CERTIFICATION PROGRAMS. Please check each of the types of education or training you have received. For each type checked, indicate its duration and whether or not you completed it. **Duration** should be reported as the number of years spent studying full-time, or the equivalent, i.e. two years half-time equals one year of full-time study.

☐ **a. APPRENTICESHIP TRAINING (e.g. carpentry, plumbing, electrician)**

1. 1 year or less 28 - 30
2. 2 years
3. 3 years
4. 4 years or more

b. Did you complete the program? 1. Yes 2. No

c. Have you been trained in more than one trade? 1. Yes 2. No

☐ **a. DIPLOMA OR CERTIFICATE PROGRAMS (e.g. community college, business college, university extension)**

1. 1 year or less 31 - 33
2. 2 years
3. 3 years
4. 4 years or more

b. Did you graduate? 1. Yes 2. No

c. Do you hold more than one such diploma or certificate? 1. Yes 2. No

☐ **a. UNDERGRADUATE PROGRAMS**
(e.g. B.A., B.Ed., B.Sc., B.S.W.)

1. 1 year or less 34 - 36
2. 2 years
2. 3 years
4. 4 years
5. 5 years or more

b. Did you graduate? 1. Yes 2. No

c. Do you hold more than one undergraduate degree? 1. Yes 2. No

☐ **a. GRADUATE OR PROFESSIONAL PROGRAMS (e.g. M.A., M.S., M.S.W., M.L.S., M.Eng., C.P.A.)**

1. 1 year or less 37 - 39
2. 2 years
3. 3 years
4. 4 years or more

b. Did you graduate? 1. Yes 2. No

c. Do you hold more than one graduate degree? 1. Yes 2. No

L. a. Have you undertaken any of the above programs while on educational leave from the Alberta Public Service?

1. Yes 2. No 40

Did you ever *apply* for educational leave?
1. Yes 2. No 41
GO TO QUESTION M

b. How many years leave did you receive? 42

1. Less than 1 year
2. 1 year
3. 2 years
4. More than 2 years

c. What percentage of your salary was paid during this time? (If you were on leave for more than one year and the amounts differed, average them.) 43

1. None
2. 25% or less
3. 26% to 50%
4. 51% to 75%
5. 76% or more

d. What percentage of tuition and other costs were paid by the Alberta Public Service while you were on educational leave? 44

1. None
2. 25% or less
3. 26% to 50%
4. 51% to 75%
5. 76% or more

M. For how many courses taken on your own time (i.e. while you were not on educational leave) has the Alberta Public Service paid part or all of the tuition and other associated costs? 45

1. None
2. 1 or 2 courses
3. 3 to 5 courses
4. 6 to 10 courses
5. 11 or more courses

N. a. Have you ever taken any career-related courses, workshops, or seminars which were not part of a formal degree or certification program? (Do not count courses taken primarily for pleasure.) 46

1. Yes → GO TO b NEXT PAGE
2. No → GO TO QUESTION O

b. **How many courses, workshops, or seminars have you taken which were offered by the Alberta Public Service?**

None 1 2 3 4 5 6+ 47

c. **How many have you taken which were offered by a University, the Public Schools, or a private institution other than your employer?**

None 1 2 3 4 5 6+ 48

d. **How many of these outside courses were partly or fully subsidized by the Alberta Public Service?**

0 1 2 3 4 5 6+ 49

O. **To what extent have you been encouraged by supervisors in the Alberta Public Service to undertake further training?**

Not at All 1 2 3 4 5 To a Great Extent 50

P. **What is the total number of years that you have worked full-time for the Alberta Public Service?** 51

1. Less than 1 year
2. 1 to 2
3. 3 to 5
4. 6 to 10
5. 11 to 15
6. 16 to 20
7. 21 to 25
8. 26 to 30
9. 31 or more

Q. **What is the total number of years that you have worked part-time for the Alberta Public Service?** 52

0. None
1. Less than 1 year
2. 1 to 2
3. 3 to 5
4. 6 to 10
5. 11 to 15
6. 16 to 20
7. 21 to 25
8. 26 to 30
9. 31 or more

R. **How many positions have you held with the Alberta Public Service that were substantially different from the one you hold now? Include those resulting from promotion, lateral transfer to a different department, changes in classification, or reclassification, provided that the change involved a significant change in the nature of the work to be performed.**

0 1 2 3 4 5 6 7 8 9+ 53

S. a. **Have you ever been employed outside of the Alberta Public Service?**

1. Yes 2. No → GO TO QUESTION T 54

b. **What is the total number of years that you have worked full-time outside of the Alberta Public Service?** 55

0. None
1. Less than 1 year
2. 1 to 2
3. 3 to 5
4. 6 to 10
5. 11 to 15
6. 16 to 20
7. 21 to 25
8. 26 to 30
9. 31 or more

c. **What is the total number of years that you have worked part-time for other employers?** 56

0. None
1. Less than 1 year
2. 1 to 2
3. 3 to 5
4. 6 to 10
5. 11 to 15
6. 16 to 20
7. 21 to 25
8. 26 to 30
9. 31 or more

d. **How many different employers, other than the Alberta Public Service, have you had over the course of your working life?**

1 2 3 4 5+ 57

e. **To what extent have you been encouraged by these employers to undertake further education or training?**

Not at All 1 2 3 4 5 To a Great Extent 58

T. **Have there been any interruptions or breaks in your career? If so, indicate the major reason the interruption occurred. (If there has been more than one interruption in your career, choose and describe the longest one.)**

0. No interruption
1. Study
2. Marriage or children
3. Armed Service
4. Poor health
5. Travel
6. Suitable job unavailable
7. Other ______________

59

U. a. **In addition to their jobs, most people have other responsibilities which might affect them as employees. First of all, we would like to know how many hours you spend on essential household tasks. Include time spent on "inside" jobs, such as cooking, cleaning, washing, budgeting, and painting, and "outside" jobs, such as gardening, making repairs, and taking care of the car. Also include time spent actively taking care of children or other members of the family. Think of a typical week, and indicate the number of hours spent each day on these and similar tasks.** 60 - 66

Day	Hours							
Monday	0	1	2	3	4	5	6	7+
Tuesday	0	1	2	3	4	5	6	7+
Wednesday	0	1	2	3	4	5	6	7+
Thursday	0	1	2	3	4	5	6	7+
Friday	0	1	2	3	4	5	6	7+
Saturday	0	1	2	3	4	5	6	7+
Sunday	0	1	2	3	4	5	6	7+

b. **How many additional hours per week do you typically spend in leisure activities with your children, such as playing games or going on outings? (If you have no children, circle "0".)**

0 1 2 3 4 5 6 7+ 67

V. a. **Do you employ any paid household help?** 1. Yes 2. No 68

b. **If "No", what would you say is the major reason for not doing so?**

1. Help not necessary
2. Help too expensive
3. Good help not available
4. Other ______________

69

W. a. **Do you make use of any paid child-care services on a regular basis other than for evening babysitting?**

1. Yes 2. No 3. Not applicable 70

b. **If "No", what is the major reason for not doing so?**

1. Help not required
2. Good care too expensive
3. Good care not available
4. Other ______________
5. Not applicable

71

X. **To what extent do you find that your family responsibilities make it difficult for you to fulfill the responsibilities of your present job?**

1. Greatly
2. Somewhat
3. Very little
4. Not at all or not applicable

72

Y. **To what extent do you feel that your job makes it difficult for you to fulfill your family responsibilities?**

1. Greatly
2. Somewhat
3. Very little
4. Not at all or not applicable

73

Z. How often do you find yourself working in addition to normal working hours?

1. Rarely or never
2. Once a month
3. 2 or 3 times a month
4. Once a week
5. More than once a week 74

AA. To what extent do your family responsibilities make it difficult for you to work after hours this often?

1. Greatly
2. Somewhat
3. Very little 75
4. Not at all or not applicable

BB. To what extent would your family responsibilities make it difficult for you to work after hours more frequently, should your job ever require it?

1. Greatly
2. Somewhat
3. Very little 76
4. Not at all or not applicable

CC. To what extent do you think that these responsibilities might interfere with your willingness to accept a more demanding or responsible position?

1. Greatly
2. Somewhat
3. Very little 77
4. Not at all or not applicable

DD. Do you think that you might be interested in working only part-time either because of family responsibilities or for other reasons? 78

1. Yes 2. Perhaps 3. No

EE. How important is the salary you earn to the maintenance of yourself and your family?

1. Salary provides *sole* support for self and dependents (if any).
2. Salary provides *major* support for self and dependents (if any), but additional sources are available (e.g. spouse's income, alimony, child support, living at home with parents, inheritance). 79
3. Salary provides approximately *equal* share of essential expenses with spouse or others.
4. Salary provides *minor* but essential share of expenses with spouse or others. 1
5. Salary provides *extras* for self and/or others. 80

FOR THE FOLLOWING FIVE QUESTIONS CIRCLE THE NUMBER WHICH BEST DESCRIBES HOW YOU FEEL ABOUT THE IMPORTANCE OF YOUR CAREER. 1 - 8

	Very Important				Not at all Important	
FF. How important is it to you that you continue working?	1	2	3	4	5	9

	Very Likely				Not at all Likely	
GG. If your family or someone close to you wished it, how likely would you be to . . .						
a. move to a less demanding full-time job?	1	2	3	4	5	10
b. give up your job and move to another city?	1	2	3	4	5	11
c. change to part-time work?	1	2	3	4	5	12
d. stop working completely?	1	2	3	4	5	13

HH. What are your job plans for the next five years? Would you expect to:

1. Continue working full-time.
2. Continue working, but change to a part-time position. 14
3. Stop working temporarily to study.
4. Stop working temporarily to marry or have a family.
5. Stop working temporarily for another reason.
6. Stop working permanently to marry or have a family.
7. Retire.
8. Stop working permanently for another reason.

II. What are your long-term career ambitions? What type of job would you hope to occupy before you retire or stop working?

1. Same or similar job as the one you currently hold.
2. Totally different job, but one at about the same level as the one you now occupy. 15
3. Promotion or transfer to a somewhat higher level position.
4. Promotion or transfer to a considerably higher level position.
5. Don't know.

JJ. a.	**Has your present supervisor ever encouraged you to apply for a better position?**	1. Yes, several times 2. Yes, once or twice 3. No 4. Not applicable	16
b.	**Have you received such encouragement from other supervisors in the Alberta Public Service?**	1. Yes, several times 2. Yes, once or twice 3. No 4. Not applicable	17
c.	**Have you received such encouragement from other employers you have had?**	1. Yes, several times 2. Yes, once or twice 3. No 4. Not applicable	18
d.	**Has your present supervisor initiated discussions with you about your career plans or future job possibilities?**	1. Yes, several times 2. Yes, once or twice 3. No 4. Not applicable	19

KK. To what extent would you be interested in career counselling, i.e. some help in thinking about and planning for your future career?

1. Very much 2. Somewhat 3. Not at all 20

LL. Is there a particular position that you plan to apply for in the next few years?

1. Yes 2. Perhaps 3. No 21

MM. How frequently do you watch the job postings within the government?

1. Usually 2. Sometimes 3. Rarely or never 22

NN. Employees move from one job to another for many reasons. Sometimes a change in job represents promotion to a position with greater salary and/or prestige. For a variety of reasons, employees sometimes seek transfer to a job which is essentially at the same level as the position they already occupy, although it may be of a different type. We would like to know the extent to which employees have sought these various types of moves, and their success in obtaining them.

FOR EACH OF THE FOLLOWING CATEGORIES, INDICATE HOW MANY APPLICATIONS YOU HAVE MADE, AND HOW MANY WERE SUCCESSFUL. 23 30

a. Applications to a higher level position during your career with the Alberta Public Service.

Made 0 1 2 3 4 5 6 7 8 9+
Successful 0 1 2 3 4 5 6 7 8 9+

b. Applications within the Alberta Public Service to a position at the same level.

Made 0 1 2 3 4 5 6 7 8 9+
Successful 0 1 2 3 4 5 6 7 8 9+

c. Applications to a higher level position while working for other employers.

Made 0 1 2 3 4 5 6 7 8 9+
Successful 0 1 2 3 4 5 6 7 8 9+

d. Applications while working for other employers to a position at the same level.

Made 0 1 2 3 4 5 6 7 8 9+
Successful 0 1 2 3 4 5 6 7 8 9+

OO. Do you think that you might ever be interested in moving within the Alberta Public Service to a totally different type of job from the one you now hold? If so, which of the following categories best describes the type of job which interests you?

0. No change within the Public Service desired.
1. Clerical and Business – e.g. typist, stockkeeper, business machine operator, accounting clerk, administrative officer, buyer.
2. Semiprofessional and Professional – e.g. librarian, research assistant, information officer, architect, accountant, auditor, social worker, psychologist, teacher, nurse, occupational therapist.
3. Social Services – e.g. corrections officer, houseparent, dean of residence, institutional aide. 31
4. Technical – e.g. arts instructor, land surveyor, museum technician, laboratory technician, photographer, electronics technician.
5. Regulatory – e.g. municipal inspector, assessor, property agent.
6. Corrections – e.g. patrol officer, sheriff's bailiff.
7. Natural Resources – e.g. fish and wildlife technician, biologist, forestry officer, park ranger.
8. General Inside Worker – e.g. institutional service worker, cleaning porter, caretaker, caretaker foreman.
9. Construction, Trades, and Outside Workers – e.g. office equipment mechanic, building superintendent, equipment operator, gardener, farm worker, agricultural officer, driver examiner.

PP. Which of the following activities would you be willing to undertake in order to advance your career, or obtain a desirable job?

	Activity	Yes	No	32 37
a.	Take another job in the same city, but further from your home.	1	2	
b.	Take a job in another city.	1	2	
c.	Accept a position for a brief period of time which you knew would be less enjoyable than the one you now have.	1	2	
d.	Attend courses or workshops offered by the Alberta Public Service on your own time.	1	2	
e.	Attend a conference out of town at your own expense.	1	2	
f.	Undertake an entire degree or certification program on your own time and at your own expense.	1	2	

QQ. Pe[illegible] are generally more competent in some aspects of their jobs than others. The statements below describe various types of employees. For each one, indicate how well the statement describes you. 38 54

	Statement	Like Me				Not Like Me
a.	An employee who is highly productive, who can make deadlines and get the job done.	1	2	3	4	5
b.	A responsible employee who can always be relied upon to perform as promised, even if it means exerting unusual effort or working late.	1	2	3	4	5
c.	A person with initiative, someone who can identify problems on his or her own, who sees things that need to be done before they are pointed out.	1	2	3	4	5
d.	Someone who keeps up with new developments on the job.	1	2	3	4	5
e.	Someone who is decisive, who is willing to take responsibility for making decisions.	1	2	3	4	5
f.	An employee who is highly motivated to do a good job; an enthusiastic worker.	1	2	3	4	5
g.	A person who can get his or her ideas across, who can explain things clearly.	1	2	3	4	5
h.	Someone who writes memos or reports clearly, concisely, and effectively.	1	2	3	4	5
i.	A person who controls his or her feelings and expresses them appropriately; someone who is neither a prima donna nor timid.	1	2	3	4	5
j.	Someone who enjoys the challenge of a difficult job, who gets a great deal of satisfaction from succeeding where others have failed.	1	2	3	4	5

		Like Me				Not Like Me
k.	A hard worker, someone who has stamina, who is energetic, and who applies himself or herself without reserve.	1	2	3	4	5
l.	A person with a real interest in people, who is at ease with others, enjoys the company of other employees, and is outgoing in establishing and maintaining good working relationships.	1	2	3	4	5
m.	A person who really has the technical background and know-how for the job.	1	2	3	4	5
n.	Someone who can analyze problems in a logical, methodical manner and arrive at a sound conclusion.	1	2	3	4	5

(IF YOU DO NOT HAVE SUPERVISORY RESPONSIBILITIES, SKIP TO QUESTION RR.)

		Like Me				Not Like Me
o.	A supervisor who is an effective leader, who can decide on a course of action and motivate others to follow.	1	2	3	4	5
p.	A supervisor who has good control of his or her section or department, who knows what subordinates are doing, who uses authority well, and "runs a good ship."	1	2	3	4	5
q.	A supervisor who recognizes the developmental needs of his or her subordinates, who trains and builds them so as to advance their own careers.	1	2	3	4	5

RR. a. **Which of the following corresponds most closely to the rating your supervisor gave you at the last performance appraisal?** 55

1. Unsatisfactory
2. Satisfactory
3. Very Good
4. Outstanding
5. Not rated

b. **How would you have rated yourself?** 56

1. Unsatisfactory
2. Satisfactory
3. Very Good
4. Outstanding

SS. **The purpose of the following items is to determine how people feel about male and female employees. The best answer to each statement is your own personal opinion. The statements cover many different and opposing points of view; you will likely find yourself agreeing strongly with some of the statements, disagreeing just as strongly with others, and perhaps being uncertain about others. Indicate how you feel by marking the number on the scale that best represents your opinion.** 57 71

	Statement	Strongly Agree				Strongly Disagree
a.	It is not suitable for women to hold highly responsible positions.	1	2	3	4	5
b.	Women are able to acquire the skills necessary to be successful supervisors.	1	2	3	4	5

	Statement	Strongly Agree				Strongly Disagree
c.	Men and women should be given equal opportunity to participate in management training programs.	1	2	3	4	5
d.	Women should not compete with men for top executive positions.	1	2	3	4	5
e.	Many women are ambitious enough to be successful in a large organization.	1	2	3	4	5
f.	Women cannot be assertive in job situations that demand it.	1	2	3	4	5
g.	There should be a strict merit system in job appointments and promotions without regard to sex.	1	2	3	4	5
h.	Men are more capable than women of learning mathematical and mechanical skills.	1	2	3	4	5
i.	There are many jobs for which men should be given preference over women in being hired and promoted.	1	2	3	4	5
j.	Men are not as suited as women to working with young children.	1	2	3	4	5
k.	It is in the best interests of the Public Service to actively seek out and encourage women employees who have management potential.	1	2	3	4	5
l.	Men are as sensitive to the needs of others as are women.	1	2	3	4	5
m.	Men are more logical and rational in job situations than are women.	1	2	3	4	5
n.	It is appropriate that men receive more pay than women, even for identical work.	1	2	3	4	5
o.	The Public Service should attempt to move interested women into the trades and other jobs which have traditionally been reserved for men.	1	2	3	4	5

THANK YOU very much for your help in providing us with this information. We assure you that your answers will be treated confidentially and given careful attention. If you would like to add any comments, please feel free to do so, using the back of this page.

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APPENDIX B

Sample Specifications

APPENDIX B

TABLE 1

Population and Sample Distribution by Occ'l Category and Sample Age Categories

Age	Occupational Group									
	Business & Clerical		Professional		Social Services		Technical		Managers	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
LT 20-29	-	615	-	-	37	61	4	1	-	-
20-24	150[a] (81)[b]	2996 (126)	105 (70)	297 (99)	221 (92)	317 (101)	186 (87)	77 (77)	12 (-)	-
25-29	181 (86)	1595 (123)	451 (108)	556 (111)	206 (90)	166 (84)	353 (103)	107 (107)	110 (71)	24 (24)
30-34	178 (86)	905 (118)	436 (107)	340 (102)	138 (78)	98 (67)	294 (99)	46 (46)	370 (104)	40 (40)
35-39	120 (74)	693 (115)	200 (89)	167 (84)	101 (68)	101 (68)	178 (86)	24 (24)	388 (105)	28 (28)
40-44	112 (72)	580 (112)	147 (80)	141 (79)	84 (62)	97 (67)	129 (76)	12 (12)	266 (97)	23 (23)
45-49	111 (71)	438 (107)	118 (73)	121 (74)	98 (67)	111 (71)	91 (65)	18 (18)	242 (94)	18 (18)
50-54	118 (73)	393 (105)	95 (66)	93 (66)	115 (72)	113 (72)	60 (52)	8 (5)	212 (91)	15 (15)
54-59	169 (84)	341 (102)	89 (64)	81 (61)	98 (67)	97 (67)	45 (43)	5 (3)	184 (87)	13 (13)
GT 59	91	183	59	48	78	63	24	3	102	4
Total	1259 (627)	8739 (908)	1700 (657)	1844 (676)	1176(596)	1224 (597)	1364 (611)	301 (301)	1876 (649)	166(166)
								Take All		Take All

a) Total No of employees in the group
b) No of employees samples, see Note 1

TABLE 2

Population and Sample Distribution by Occupational and Composite Age Categories

Group	Estimated Population Size[a]	Number of Sample Returns	Effective Sample Size
BUSINESS AND CLERICAL			
Young - Male	432	149	148
Female	5428	217	189
Middle - Male	528	141	127
Female	2064	221	212
Senior - Male	565	149	135
Female	1261	198	176
PROFESSIONAL			
Young - Male	803	208	167
Female	979	196	163
Middle - Male	1549	346	331
Female	652	194	163
Senior - Male	927	228	208
Female	359	145	127
SOCIAL SERVICE			
Young - Male	500	104	104
Female	563	92	92
Middle - Male	302	73	68
Female	300	100	94
Senior - Male	374	83	71
Female	366	97	85
TECHNICAL			
Young - Male	619	165	164
Female	199	155	154
Middle - Male	569	174	171
Female	74	50	49
Senior - Male	208	89	65
Female	28	18	10
TOTAL	19649	3592	1660

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[a] see note 2

SAMPLE NOTES

1. The size of the sample to be drawn was calculated according to the formula

$$n=1/\left[(a^2 + 1/N)/p\right], \text{ where:}$$

n is the required number to be drawn for the sample;

a is the desired confidence level for the data, which was set at .95 for this study;

N is the population size for that age/occupational group;

p is the expected sample completion rate which was estimated to be .70

2. The population sizes are estimates only because the total number of managers in each age and occupational group was not known. Population sizes were estimated by taking into account the age and occupational distribution of male and female managers.

APPENDIX C

Long Form of Management Interviews

STUDY OF THE ALBERTA PUBLIC SERVICE

Executive Interview Schedule
Long Form

As you are aware from the letter you received, a comprehensive study is being done of the Public Service, primarily in order to determine why women are generally concentrated in lower level positions. The study will be looking at the job orientation of men and women, their vocational preparation and job performance, as well as how the organization itself encourages or discourages their ambitions.

This study has been commissioned by the Alberta Human Rights Commission, and is being conducted by Women Associates, an independent management consulting firm. Marketing Information Research has been engaged by Women Associates to collect some of the preliminary data. A variety of information is being assembled. There will be a survey of a representative sample of employees, asking them about their education, their attitudes towards the job, and various aspects of their work experience. There will also be a study of the organization and administration of the Public Service. As a third part of the study, we are talking with men and women who are in administrative positions about their educational and job history to find out what seem to be the most important career paths in the Public Service, and what factors influence careers the most. This part of the study is being done first, partly in order to draw on the experience of people who have been successful in the Public Service as a guide to the rest of the study.

There are a number of questions I have been given to ask you, but they are only a guide, and I hope that you'll feel free to expand on them and add anything you think is relevant to the general issue. I'd like to assure you that anything you say here today will be confidential. I will be taking notes of what you say, as well as recording our conversation. The recording will allow us to recheck any parts of the notes that are unclear. But both the notes and the tapes will have any identifying information removed, and will be sent by MIR to the consultants for analysis.

Do you have any questions about the interview or the study in general that I might be able to answer? .... We'll start with some basic data.

A. Position: 1. SOI 2. SOII 3. EOI 4. EOII

B. Department: ______________________________

C. Age: ____ D. Sex: 1. Male 2. Female

E. Marital status: 1. Single 2. Married 3. Separated, widowed, divorced

F. Number of children: _____

G. I'd like to know how far you went in school and what kind of training you received before taking your first, full-time permanent job? (FILL IN EACH ITEM BELOW THAT APPLIES).

1. High School: Subject area ____________ Duration (in years) ____

2. Vocational training (e.g. business college, drafting, nursing):

   Subject area ________________________ Duration (in months) ____

3. College: Subject area ________________ Duration (in years) ____

4. Professional or post-graduate training (e.g. medicine, accounting, social work, M.A.):

   Subject area ________________________ Duration (in months) ____

5. Other (describe): ____

   Subject area ________________________ Duration (in months) ____

H. What was your first, full-time permanent job?

1. Job description: ____

   Employer: 1. Other 2. P.S.C. (IF"2"), Dept.: ________________

   How did you find out about that job? 1. Ad 2. Employment Agency
   3. Acquaintance 4. Other ______________________

(CONTINUE WITH OTHER JOBS. NOTE GAPS IN JOB HISTORY AND FILL IN FURTHER EDUCATION AND INTERRUPTIONS SECTIONS AS APPROPRIATE. BE SURE THAT A COMPLETE VOCATIONAL AND EDUCATIONAL HISTORY IS OBTAINED, INCLUDING TRAINING TAKEN ON A PART-TIME BASIS, CONCURRENT WITH A PAYING JOB.)

What was your next job?

2. Job description: ____

   Employer: 1. Other 2. P.S.C. (IF "2"), Dept.: ______________

   We're particularly interested in (how you came to change jobs/ what led to your promotion). USE THE FOLLOWING AS PROBES IF RELEVANT INFORMATION DOESN'T SPONTANEOUSLY EMERGE. "How did your family feel about this?" "Sometimes supervisors encourage an employee to (apply for promotion/make a change). Did this happen in your case?"

3. Job description: ______________________________

Employer: 1. Other 2. P.S.C. (IF "2"), Dept.: __________

Impetus for change:

4. Job description: ______________________________

Employer: 1. Other 2. P.S.C. (IF "2"), Dept.: __________

Impetus for change:

5. Job description: ______________________________

Employer: 1. Other 2. P.S.C. (IF "2"), Dept.: __________

Impetus for change:

5. Job description: ______________________________

Employer: 1. Other 2. P.S.C. (IF "2"), Dept.: __________

Impetus for change:

5. Job description: ______________________________

Employer: 1. Other 2. P.S.C. (IF "2"), Dept.: __________

Impetus for change:

I. Further Education.

1. Type: 1. High School 2. Voc'l training 3. College
4. Prof'l or post-graduate 5. Other ____________

Offered by: 1. College or university 2. Employer
3. Private institution 4. Other __________

Duration (in months): ____ Paid by employer: 1. Yes 2. No

Concurrent to job #____ OR Subsequent to job #____

What led you to take this further training? (USE SIMILAR PROBES AS FOR JOB CHANGES, ELICITING THE ROLE OF THE EMPLOYEE'S OWN INITIATIVE AND CAREER PLANNING, ENCOURAGEMENT FROM FAMILY AND EMPLOYER?)

2. Type: 1. High School 2. Voc'l training 3. College
4. Prof'l or post-graduate 5. Other ____________

Offered by: 1. College or university 2. Employer
3. Private institution 4. Other __________

Duration (in months): ____ Paid by employer: 1. Yes 2. No

Concurrent to job #____ OR Subsequent to job #____

Impetus:

3. Type: 1. High School 2. Voc'l training 3. College
4. Prof'l or post-graduate 5. Other ____________

Offered by: 1. College or university 2. Employer
3. Private institution 4. Other __________

Duration (in months): ____ Paid by employer: 1. Yes 2. No

Concurrent to job #____ OR Subsequent to job #____

Impetus:

4. Type: 1. High School 2. Voc'l training 3. College
4. Prof'l or post-graduate 5. Other

Offered by: 1. College or university 2. Employer
3. Private institution 4. Other ________________

Duration (in months): ____ Paid by employer: 1. Yes 2. No

Concurrent to job #____ OR Subsequent to job #____

Impetus:

5. Type: 1. High School 2. Voc'l training 3. College
4. Prof'l or post-graduate 5. Other

Offered by: 1. College or university 2. Employer
3. Private institution 4. Other ________________

Duration (in months): ____ Paid by employer: 1. Yes 2. No

Concurrent to job #____ OR Subsequent to job #____

Impetus:

6. Type: 1. High School 2. Voc'l training 3. College
4. Prof'l or post-graduate 5. Other

Offered by: 1. College or university 2. Employer
3. Private institution 4. Other ________________

Duration (in months): ____ Paid by employer: 1. Yes 2. No

Concurrent to job #____ OR Subsequent to job #____

Impetus:

J. Interruptions.

1. Reason: ____________________

   Duration (in years) ____ Subsequent to job #____

2. Reason: ____________________

   Duration (in years) ____ Subsequent to job #____

3. Reason: ____________________

   Duration (in years) ____ Subsequent to job #____

4. Reason: ____________________

   Duration (in years) ____ Subsequent to job #____

K. Do you have any career plans for the future? How do you think your career might develope in the next few years?

L. How important would you say your work is to you at this time? What part does it play in your life?

Does your husband/wife work? IF SO, how would you rate the importance of your career relative to theirs?

Would you be willing to give up or change jobs if your spouse wished if for some reason, say that their own career required that they move or they felt that it would be good for the family if you were not working or were working in a less demanding job?

Initially, when you started working, what were your career plans or goals?

How has your committment to a career changed over the years?

When and why do you think these changes occurred?

M. What role does your family play in your career life? Does your family play an important supportive role with respect to your work? To what extent do family responsibilities interfere with the demands of your job, or make to difficult to fulfill them?

Has it always been this way? What is responsible for the change?

N. You have been very successful in the Public Service and that means that you have been recognized as performing at a high level. We would like to know what people like yourself think has been responsible for their success, what specific aspects of their job performance caused themto be well thought of and to move ahead. Can we start with your first job? If there any aspect-of your performance in that job with which you were particularly satisfied? (PROCEED THROUGH REMAINING JOBS IN SIMILAR FASHION).

1. ____

2. ____

3. ____

4. ____

5. ____

6 ____

What do you feel you have accomplished in your present position?

O. Have there been any barriers to your career or difficulties you feel you had to overcome? These could be things either in yourself or in others, or difficulties in the situation in which you found yourself.

P. You know that this study is particularly concerned with problems of women, and is designed to determine what are the most significant barriers to their advancement. Statistics collected by the P.S.C. show that the average salary of women employees is $12,871 a year, while men earn an average of $17,321. From your experiences in managment what would you think are the most important factors? (THE FOLLOWING CAN BE USED AS PROBES: Family responsibilities, Career committment, Ambition, Job preparation, Job performance, Failure to apply for or accept promotion, Failure of the organization to encourage women, Discrimination in hiring and promotion).

Q. What do you think is the attitude of most managers to women in the Public Service, in terms of their performance as employees and their suitability for positions of responsibility?

Do you think there has been any change in these attitudes in the past few years?

Do you see any change in the way women see themselves, in the way they approach their jobs, or in their career goals?

R. (FOR WOMEN ONLY). Are you aware of any barriers or difficulties that you had to face because you are a woman? (USE SAME PROBES AS FOR ITEM P).

S. Is there anything else that you would like to comment on that you feel we should know or be aware of as the study progresses?

THANK YOU very much for your time and help. The type of information you have given us will be a very useful part of the study. We hope you also won't mind if we include you in the survey and send you a questionnaire. The purpose of that is to obtain some data on the validity of the questionnaire. We will want to see that the responses people make to the questionnaire are generally similar to how they respond in an open, in-depth interview situation. This will serve as a check on the questionnaire.